MOBILITY PATHWAYS: MOBILE LIVES IN A TRANS-HIMALAYAN POWER CORRIDOR

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MOBILITY PATHWAYS: MOBILE LIVES IN A TRANS-HIMALAYAN POWER CORRIDOR

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Roads hold an archetypal position in development discourse as precursors to other development interventions and essential components of economic growth. In Nepal where a quarter of the population has to walk more than four hours to the nearest road not surprisingly road development has been the emblematic infrastructure development trajectory for the last six decades. Roads have a definitive impact on human mobility; hence they are intimately implicated in mobilities.

This dissertation investigates how mobilities couple and converge creating hybrid spaces rich in potentialities that can create new mobility pathways. In some cases, this process can lead to cascading effects where mobilities expand and flow into surrounding material and social landscapes. Focusing on the Trishuli River Valley in Rasuwa District a mere 150 km northwest of Kathmandu I show how gendered, hydro project, and disaster mobilities interact. I argue that local agency negotiating actors in what was historically viewed as a peripheral frontier of extraction turn the tables on this state gaze, to a gaze from the homeland of autochthonous agents negotiating the developmental changes they were previously denied by the state. I further show how these are highly contested landscapes embedded in geopolitical, socioeconomic, diverse cultural, and gendered processes. I posit that homeland voices clarify these

mobility-scapes within the mobilities framework that I conceptualize and introduce. I leverage this mobilities framework to bring legibility to necessarily 'messy', complex, and convoluted processes providing purchase to analyze the frictions inherent in state making trajectories and in their absence.

In so doing, I contribute to the field of mobilities studies by providing context specific ethnographically rich vignettes of diverse agency space creating actors in their lived mobility-scapes. Focusing on three main mobilities, gendered, hydro project, and disaster mobilities, I enliven the discourse on globalization, liquid modernity, and infrastructure studies by putting them in tension with 'non-spaces'. I argue that 'non-spaces' and 'zones of not yet' are illusions that underlie the gaze of frontier focused trajectories at the expense of lived homeland experiences.

Findings hold relevance for development planners, social scientists, disaster preparedness architects and practitioners, gender scholars, and policy makers.

BIOGRAPHICAL SKETCH

Robert Edward Beazley was born in Niagara Falls, New York on April 21, 1954. During his teenage years, he developed a love for being outdoors and exploring rivers and lakes by canoe. In 1976, after graduating with a BS in geography from the University of Calgary, he worked as a research associate in the Fluid Dynamics and Diffusion Laboratory of Colorado State University, Fort Collins, Colorado. In 1981, he moved to North Carolina to work as a canoe and kayak instructor, and adventure travel leader for the Nantahala Outdoor Center. He visited Nepal for the first time in 1984. From 1985 to 2007, he continued to lead whitewater and trekking adventure travel expeditions in Nepal as well as in India, Bhutan, Japan, South America, North Africa, Europe, and the United States. In 2004, he studied Traditional Chinese Medicine at the Colorado School of Traditional Chinese Medicine in Denver. From 2005 to 2007, he moved to Dharamsala, India to study Tibetan Buddhist philosophy at the Library of Tibetan Works and Archives, the Institute of Buddhist Dialects, and the Tushita Meditation Center. After returning to the United States in 2008, Beazley entered the MS program in the Department of Natural Resources at Cornell University, continuing to pursue a PhD in the same department. His research interests include coupled social and ecological systems[1], mobilities, gender studies, road development, trans-border infrastructure, and the role of Nepal in China's Belt and Road Initiative.

[1] For an in-depth discussion of coupled social and ecological systems see Beazley 2013 and Beazley and Lassoie 2017.

This dissertation is dedicated to my parents William E. Beazley and Mary Ola Roberts Beazley.

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This dissertation would not have been possible without the generous support of numerous individuals at Cornell University and in Nepal. It would have been impossible to do alone and even with the host of actors I want to thank there were times when I did not think I could complete it. The writing of it was complicated by a vehicle accident I was involved with in Nepal that set back my writing at least a year and half contributing to my self-doubt.

First, I thank James Lassoie, my advisor in the Department of Natural Resources at Cornell University and chair of both my PhD dissertation committee and my MS thesis committee. Jim has been an incredible advisor, mentor, and friend throughout my 10-year academic career at Cornell. No matter how crazy an idea I presented he never began his comments with no. He skillfully encouraged me to rework my concepts more academically while constantly providing positive feedback—a skill I greatly admire having been a canoe and kayak instructor for more than 30-years previous to my return to academia. His mentorship was extremely influential beginning from when I first interviewed with him during my search for an advisor in 2008.

At the end of my first semester he included me in a trip to China where we both presented on our research at Beijing Normal University where he had an academic posting and several graduate students. It was at this time that I met Professor Dong Suikui who has also had an impact on my academic career. During this trip we toured research sites in Yunnan where I met many graduate students who were part of

the IGERT at University of Wisconsin Madison and their coordinator Terri Allendorf. It was also during this time that I visited Northwest Yunnan and fell in love with its beautiful landscapes and people, which Jim and his wife Dr. Ruth Sherman had spoken so highly of from their research in the area in 2001-2002.

The following summer (2009) Jim asked me to help organize a Cornell faculty field trip to the area through which I was able to gain valuable insights about my research and research in general from interaction with Cornell Natural Resource Department faculty Karim-Aly Kassam, Rebecca Schneider, and Steven Morreale as well as the Beijing Normal University graduate students who were part of the field trip. After the trip was over I stayed in Northwest Yunnan to do a comparative study between the impacts of expanding road networks along the Kawakarpo pilgrimage *kora* and my research site in Nepal.

If you trace my mobility pattern during my first year at Cornell alone it is not surprising that I chose a mobilities framework for my dissertation to which I must give credit to the 'Lassoie-mobility'. Over a long-distinguished career at Cornell and some 85 MS and PhD students Jim deserves a Lassoie-mobility award for mentoring, motivating, and encouraging graduate students at both Cornell and Beijing Normal University to move forward. Thank-you Jim and Ruth for so much—I do not have the words to express my profound appreciation.

To Karim-Aly Kassam I also want to extend my gratitude for mentorship which provided a perfect balance to Jim's in both my MS and PhD. Karim's focus on indigenous ways of knowing opened my eyes to new ways of looking at knowledge and impacted the way I approach my research. Karim was always supportive,

providing excellent critical evaluation of my progress in addition to inviting me to join the Kassam Research Group where I benefitted from his leadership and his graduate students' thoughtful comments. Thank-you Karim, you have influenced me in many ways for which I am most grateful.

Kathryn March, David Holmberg, Shambhu and Banu Oja, and the Cornell Nepal Study Program laid a valuable foundation for my whole academic career. It is hard for me to imagine completing my MS and PhD without this support network. Much of my deeper understanding of Nepali culture is a direct result of their commitment to building the strongest Himalayan and Nepal studies program in the US. Kathryn's gender studies class at Cornell was instrumental in helping focus my approach to gendered mobility (*Chapter 5*) and opened my eyes to the vast literature on gender studies. David was very helpful in critiquing my initial research proposal in Nepal and in motivating me to start asking questions in the field—learning how to find my questions in the field. Both Kath and David have continued to support me throughout my studies at Cornell—thank-you both.

Shambu and Banu Oja are two of the most patient and understanding teachers I have ever had. Learning a new language at my age is not easy and they never gave up on me despite my inadequacies. All one has to do is look at the number of professors at major universities who were students of Shambu and Banu to understand their skill and passion for teaching Nepali. In addition to teaching they accepted me as part of their family—for all this and much more I cannot thank-you enough.

While I have not known Carol Colfer as long as those previously mentioned she still has had a strong impact on my PhD. She willingly accepted my request for her

to be the fourth member of my PhD committee and brings another gender perspective to my dissertation that is greatly appreciated. She is quick to answer my emails and generous in sending information to support my research. Her prolific writing skills provided inspiration during the writing phase of my dissertation—an example that I strive to live up to. Thank-you Carol.

Austin Lord and Galen Murton have been immensely helpful both in my research in Nepal and collaborating here in the US on our mutual research interests. I have learned a great from both of them and continue to appreciate our friendship and ongoing collaborations. In Nepal Austin and his wife Sneha's family were very generous in providing a warm family environment during the early part of my recuperation from my surgery. Austin, Sneha, and Galen have always been willing to provide a bed for a homeless graduate student—thank-you.

My research would not have been possible without the help of my research assistants. Sudan Bhattarai was a remarkably reliable and competent field assistant that responded to all of my requests as well as being pro-active. He arranged interviews before I was even out of bed and provided excellent commentary on our interviews at the end of the day. Sudan and his family took me in as a family member and I am most grateful for all the family meals and camaraderie. Tej Thing, Lhakpa Sherpa, and Kedar Bhattarai made a great team while conducting interviews in the Timure area putting in long hours in cold conditions with a great sense of humor.

I must thank all the villagers who participated in interviews and helped me in various ways during my research both pre- and post-earthquake as well as all the volunteers and hospital staff that I was involved with post-earthquake. Their selfless

giving was and is a true inspiration to me.

Numerous graduate students were instrumental in shaping my thoughts, critiquing my arguments, and providing friendship in Nepal—some of these include Geoff Massy, Babs Grossman-Thompson, Luke Wagner, Ben Linder, Elsie Lewison, Matthaeus Rest, and other members of the Nepal Research Group. At Tribhuvan University Bhanu Timsila was extremely helpful in coordinating training for my research assistants. In addition, professors Siena Craig (Dartmouth), Mark Turin (University of British Columbia), Sara Shneiderman (University of British Columbia), Tom Fricke (University of Michigan), Seira Tamang (Martin Chaudhary), Om Gurung (Tribhuvan University), and Ram Chettri (Tribhuvan University) were all influential in helping me along the path.

Financial support made my field research possible thanks to the Fulbright Doctoral Dissertation Research Abroad Fellowship. Laurie Vasily and her staff in the Fulbright office Nepal were graciously helpful in aiding me to obtain visas and conducting research.

I must put in a word of thanks to my landlord in Nepal, Ram Ballav and his staff at Ram's Rooms. They were always very friendly and helpful providing a quiet haven in the middle of Boudha. Ram's recent creation, Ramsterdam Café, became my go-to location for writing projects—a place I could go to concentrate and eat great Nepalese food and iced latte´s. In addition, my friends in Rasuwa, Ram and Sita Paudel, and Uddav Devkota were very helpful during portions of my fieldwork.

Finally, my immediate family has always been wonderful in supporting me during my academic career. My sister Mary and her husband John have been

instrumental in supporting my vagabond lifestyle, always providing a home when I returned from Nepal. Their children Alice and Ethan have been wonderful in accepting me as the homeless uncle. They were also exceedingly helpful in my recuperation period after my surgeries in the US. Thank-you all for helping me through that very difficult period of my life. My brother Bill and his wife Kitsie have always welcomed me at their home where I would spend Christmas while in the US and the summer of 2017 when I first began writing my dissertation in earnest. Their extended families Sarah and Willis have also opened their homes to me and made me feel welcome. Thanks to all of you as well.

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LIST OF ABBREVIATIONS

APM All Party Mechanism

ACA Annapurna Conservation Area

ACAP Annapurna Conservation Project

AP Associated Press

BMW Bavarian Motor Works

BRI Belt and Road Initiative

CBS Central Bureau of Statistics

CFREU Charter of Fundamental Rights of the European Union

CWE China Water and Electric

CNSP Cornell Nepal Study Program

CSR Corporate Social Responsibility

DMD Disaster Management Department

DDC District Development Committee

ESD Earthquake Safety Day

EIA Environmental Impact Assessment

FAO Food and Agriculture Association

FDI Foreign Direct Investment

GoN Government of Nepal

HEP Hydro Electric Project

IMT Individual Means of Transport

IEE Initial Environmental Examination

IDP Internally Displaced Person

LNP Langtang National Park

LRN Local Road Network

M Magnitude (Richter Scale)

MOU Memorandum of Understanding

MoHA Ministry of Home Affairs

NEA-ESSD Nepal Electric Authority-Environment and Social Studies Department

NHEDF Nepal Healthcare Equipment Development Foundation

NANA Nepalese American Nurses Association

NRs. Nepalese Rupees

PwD Person with Disabilities

PTSD Posttraumatic Stress Disorder

RCW Rising Cricket for Women

SAR Search and Rescue

SAATH Social Service Awareness Raising and Advocacy for Tranquility and Humanity

THT Tamang Heritage Trail

TAR Tibet Autonomous Region

TRAPP Tourism for Rural Poverty Alleviation Programme

UCPN-M United Communist Party of Nepal-Maoist

UML United Marxist Leninist

UN United Nations

UNRHCO United Nations Resident and Humanitarian Coordinator's Office

USAID United States Agency International Development

UDHR Universal Declaration of Human Rights

VDC Village Development Committee

VT&C Volunteer and Technical Communities

WB World Bank

WHO World Health Organization

WHO-AIMS World Health Organization Assessment Instrument for Mental health

Systems

PREFACE

My interest in Nepal stems from my previous 25-year career as an adventure travel guide in Asia, Africa, Europe, and the US—interestingly, of all the more than 15 countries in which I led trips Nepal became my favorite. Not surprisingly then, when I came to Cornell to start my MS in 2008, I was determined to do my research in Nepal. Fortunately, many things came together my first year at Cornell that allowed me to do that. Hence, in 2009 I returned to Nepal as part of the Cornell Nepal Study Program (CNSP). This proved to be fortuitous for my academic career as I learned how to write a research proposal, apply for IRB approval, and conduct research in the field in what was my second semester enrolled as an MS student. For a mature student returning to academia after a long professional career this opportunity stimulated my interest in pursuing my MS and desire to do more research.

I applied to spend a second semester at CNSP rather than return to the Cornell campus. I became intrigued with my research and felt that another semester in the field would help me tell the whole story of *The Impacts Expanding Rural Road Network on Villages in the Annapurna Conservation Area* (Beazley 2013). I returned to the US in 2010 to resume my course of study on the Cornell campus but continued my interaction with the CNSP program through the Cornell Intensive Summer Nepali Language with Nepali language teachers Shambhu and Banu Oja and with Kathryn March (co-founder CNSP) who would give our summer language class weekly Nepal culture lectures.

I cannot overstate the importance of CNSP in my overall academic career.

CNSP arranged all my visas and research permits and was a warm friendly home in Kathmandu—a truly unique place!

During my MS I became increasingly interested in roads and mobility stimulating new questions and observations that I wished to investigate. Before completing my MS, I was already formulating ideas for a PhD. Upon completion of my MS and embarking on my PhD my advisor James Lassoie was instrumental in connecting me with Springer Publications who were interested in publishing my MS as a book, which was subsequently co-authored with Lassoie(Beazley and Lassoie 2017). As I worked on the book many new ideas and concepts arose which I wished to pursue as part of my PhD. As I transitioned from my MS to my PhD I expanded my MS focus on rural road impacts to include a gender element (*Chapter 4*) in a different area of Nepal than my MS—Rasuwa District.

As I began conducting interviews in Rasuwa (2014) I found a unique model of road building that was directly linked to the burgeoning hydropower development in the Trishuli River Valley. At this point I decided to widen my study on gendered mobility to include consideration of what I call hydro project mobility (*Chapter 5*)—in other words roads built to local villages by hydropower companies.

In April 2015 a magnitude 7.8 earthquake hit Nepal followed by numerous aftershocks that had profound impacts on everyone's mobility patterns with the destruction of buildings, bridges, roads, and trails, and numerous landslides. While working as a humanitarian aid volunteer for three different self-organizing grassroots aid initiatives in Kathmandu and Rasuwa I saw first-hand how earthquake-affected persons negotiated new mobility pathways amid a landscape of destruction and chaos.

It was during this time that I began to think about making what I call disaster mobilities (*Chapter 6*) part of my dissertation.

Before the earthquake occurred, I had begun collaborating with Austin Lord (PhD candidate Anthropology, Cornell University) as we were doing research in the same valley and in many of the same villages. At times we coordinated research assistants so that we could interview the same groups at the same time about both mobility and hydropower development. This again proved very fruitful as the two are intimately connected as I point out in the body of my dissertation (*Chapter 5)* and I was able to learn a great deal about hydropower development and the process by which 'project-affected people' leverage hydropower companies to build roads to their villages.

In 2015, Galen Murton then a PhD candidate in Geography from the University of Colorado, Boulder (now a geography professor at James Madison University) arrived in Nepal to continue his research on borderland infrastructures along the Nepal-Tibet border. He was very interested in the Rasuwagadhi border crossing where Austin and I were doing our research and subsequently joined us on several of our research field trips. Our mutual interests in border infrastructure led to numerous stimulating conversations and fueled us to expand our research to visit the Kodari border and the Arniko Friendship Highway. Comparison between borders was influential and furthered my interest in focusing future research on border landscapes. By the time the earthquake hit the three of us had formed a strong bond of friendship and respect so it was not surprising that we decided to co-found (along with several other friends including Austin's wife Sneha) Rasuwa Relief to focus on providing

earthquake aid to Rasuwa District, a landscape we were very familiar with after conducting numerous interviews in communities there.

Our mutual collaborations led to a co-authored paper Murton, Lord, and Beazley 2016 and a single author paper (Beazley 2017). We have attended conferences together and continue to discuss ongoing research ideas and future collaborations. It would have been much harder to produce this dissertation in their absence, as the nature of this dissertation requires variegated nuanced insights.

In closing this preface, I want to again acknowledge that portions of this dissertation were previously published in Beazley 2017; Beazley and Lassoie 2017; and Murton, Lord, and Beazley 2016.

CHAPTER 1

INTRODUCTION

Roads hold a quintessential position in development discourse as a precursor to other development interventions and as an essential component of economic growth. In Nepal where a quarter of the population has to walk more than four hours to the nearest road, not surprisingly road development has been the emblematic infrastructure development trajectory for the last six decades. In my MS thesis I focused on the impacts of expanding road networks on communities in the Annapurna Conservation Area (Beazley 2013). Roads have a definitive impact on human mobility; hence they are intimately implicated in mobilities. But human mobility takes many forms and uses variegated material configurations. It follows then, that an understanding of human-environment interactions requires a broader focus beyond roads to intercalate human movement within a more comprehensive mobilities paradigm.

This dissertation examines the everyday lived experiences of mobilities in the Nepalese Himalayas. Mobility is defined as "the movement of people from one place to another in the course of everyday life ... the daily rounds of activities such as paid and unpaid work, leisure, socializing and shopping" (Hanson 2010:7). However, it is not just a physical phenomenon, it is social as well. It is socially produced and unlike movement, it is a contextualized process both materially and culturally. I examine the mobility pathways of various actors in the Trishuli River Valley of Rasuwa District, a one-day drive northwest of Kathmandu (**Figure 1.1**).

Figure 1.1 Rasuwa District with Trishuli River Valley and border towns Rasuwagadhi (Nepal) and Kyirong (Tibet) (Source: Adapted from Encyclopedia Britannica Inc. 2007)

I show how geo-political, political economic, and geo-physical forces rub up against each other influencing identity-making, future imaginings, and state versus local agency landscapes. Interestingly, as these agency mobility-scapes (Uteng 2011) are energized by the frictions of local, extra local, and state agents they become shaped in ways that reorient historical center periphery landscapes.

In Rasuwa, along the Tibetan border, everyday lived mobilities reify the gaze from the homeland turning the tables on uneven state development trajectories that until recently only saw their homeland as a remote and isolated frontier—"an edge of space and time: a zone of not yet (Tsing 2003:5100)"—"The landscape itself appears inert: ready to be dismembered and packaged for export"(Tsing 2005:29). The Tamang ethnic group, Tibetan refugees, in-migrants from the south, trade-transport entrepreneurs, Nepalese and Chinese hydro project[2] workers, managers, and engineers and disaster aid volunteers move in imbricated mobility-scapes fashioning political economies, negotiating geopolitical spaces, and constructing emerging infrastructures and mobility pathways.

These pathways are embedded in the cultural history of the Trans-Himalayan trade that shaped the Trishuli Valley as one of the most important economic and cultural transmission mobility corridors between China and South Asia (Diemberger 2007). While trade was/is important, other exchanges take place that shape the lived spaces of both wayfarers and inhabitants (Saxer 2016). It is exactly these exchanges—physical, environmental, cultural, political, economic, and imaginary—that this

[2] For the remainder of this dissertation I use the term hydro project as a short hand for hydroelectric power project.

dissertation seeks to untangle by shining light on the processes that mobilities influence and shape in this Trans-Himalayan power corridor.

Here, power is used metaphorically to characterize the historical importance of the Trishuli Valley as a vector for economic and cultural transmission and power is also used in the material sense (hydroelectric power) wherein the Trishuli Valley is arguably the most economically robust landscape of Nepal's emerging hydropower development ascendency (Lord 2016). Power additionally speaks to the contested landscape that mobile agents negotiate daily as variegated mobilities couple and converge, synergizing hybrid spaces rich in potentialities that motivate and energize diverse scalar and heterogeneous cultural actors. In this process local actors reshape spaces where previously they lacked substantial influence over life options and imaginings, making them agency[3] rich spaces. These aforementioned persons I refer to as agency space-creating[4] actors.

In the following chapters I leverage a mobilities framework to bring legibility to necessarily 'messy', complex, and convoluted processes providing purchase to analyze the frictions inherent in state making trajectories and in their absence. In so doing I contribute to the field of mobility studies by providing context specific, ethnographically rich vignettes of diverse agency space creating actors in their lived mobility-scapes. Focusing on three main mobilities, gendered, hydro project, and disaster mobilities, I enliven the discourse on globalization, liquid modernity, and

[3] For a discussion on the meanings of agency used here see Ahearn 2001:53-56.
[6] In other words they have been able to create spaces where they can exercise agency

infrastructure studies by putting them in tension with 'non-spaces' (Augé 1995)[5]. On the contrary I argue that 'non-spaces' and 'zones of not yet' (Tsing 2005:29)[6] are an illusion that underlie the gaze of frontier focused trajectories at the expense of lived homeland experiences.

The mobility pathways I illuminate appear materially as roads, trails, tracks, and footpaths. As I argue they are more than just material forms, they are social networks or as Wilson (2004:529) suggests "stretched-out places where intersecting social relations cluster and adhere". As these mobility-scapes are used they take on

[5] French anthropologist Marc Augé argues that 'non-spaces', a term he coined, refers to spaces where people are transient such as airports, shopping malls, and roads and that these transient spaces render actors anonymous—hence they do hold enough salience to be considered anthropological 'spaces'. While acknowledging that the experience of 'non-spaces' is subjective he emphasizes that the subjective experience of 'non-space' is manifest in the transient actors while others who, for example may work daily in an airport, may not experience the space (e.g. the airport) as a 'non-space'. I argue that in Nepal from the perspective (gaze) of the transient actor 'non-spaces' such as roads are in fact highly meaningful social spaces where salient interpersonal interactions both define and shape the transient space. From the perspective of the local actors who are daily transient in these spaces they are anything but "non-spaces" whereas from the perspective of an 'outsider' moving quickly through these spaces as only a liminal space between the origin (point A) to the destination (point B) they theoretically may be perceived as 'non-spaces'. It would seem that in fact I am in agreement with Augé in that 'non-space' is highly subjective, which in fact I am. But here I am trying to draw out the subtlety of subjectivities within a transient space in Nepal—that, in fact, whether one is a long distance, short distance, or locally transient actor (or seemingly sedentary actor) the socio-cultural underpinnings of the Nepalese experience renders the subjectivity of 'non-space' vis á vis the Western experience of 'non-space' inchoate. Thus within the Nepalese context there is tension with (not discounting of?) Augé's 'non-space', and in fact "non-space' in this context may be a colonialist constructed attitude/perspective adopted by the Nepalese state in its internal colonization project; a subtle but salient point within the context of this dissertation.

[6] Tsing refers to 'zones of not yet' within the context for frontiers, writing, "A frontier is an edge of space and time: a zone of not yet - not yet mapped, 'not yet' regulated. It is a zone of unmapping: even in its planning, a frontier is imagined as unplanned (Tsing 2003:5100)". In this sense I am in agreement with Tsing in that 'zones of not yet' are illusions, imagined by the state in this way, whereas the homeland lived reality is quite different—in tension with or contrary to the state's imagining.

human meaning developing processual histories of social inhabitations nested in the 'messy' lived experiences of everyday enterprise. Roads hold a definitively sacrosanct position in the hierarchy of infrastructure as the precursor and foundation for all other development trajectories—the 'key' to modernization and economic development (Beazley and Lassoie 2017). In essence they evolve a secondary 'purpose'—intended as material-mechanical landscapes, once inhabited they also become social and cultural 'institutions'. Here I follow Larkin's assertion that,

> [I]nfrastructures also exist as forms separate from their purely technical functioning, and they need to be analyzed as concrete semiotic and aesthetic vehicles oriented to addressees. They emerge out of and store within them forms of desire and fantasy and can take on fetish-like aspects that sometimes can be wholly autonomous from their technical function (2013:327).

In Nepal the "fetish-like aspect" (Larkin 2013) of roads was ushered in after the fall of the Rana dynasty (1846-1951), the opening of Nepal to westerners, and the ensuing wave of development aid that came with it. Untangling gendered, hydro project, and disaster mobilities in Nepal necessitates a careful historical scrutiny of the state's road and development trajectory. Roads are the substrate on which these three mobilities are constructed both materially and socially. In the following section I provide context on roads and development in Nepal as foundational material for the remainder of the dissertation. A more comprehensive coverage of this topic can be found in Beazley and Lassoie (2017).

Context

Roads and Development in Nepal

Until the 1950s the only way in and out of the Kathmandu Valley was by foot

or on the backs of animals (Beazley and Lassoie 2017). While geography played a role in this, geopolitics was equally forceful in keeping the capital ‘isolated’. Ever since the consolidation of Nepal in the mid 18th Century by the Gorkha kingdom, trade routes servicing Kathmandu have been contested geopolitical spaces embedded in Nepal’s political economic landscape. As Liechty explains (1997:32-33):

> From the time of the Gorkhali conquest, control over the means of communication with areas outside the Kathmandu valley had been a major concern of Nepali foreign policy. One "road" linked the valley with the plains and at least during Prithvi Narayan's reign, anyone using or attempting to open new, less rugged routes was subject to capital punishment (M. Regmi 1971:164-165). The one route that the Gorkhali government left open was meant to be awe-inspiring. It was a matter of state policy to 'maintain' the road in as bad a condition as was possible. Its ascents and descents were components of the national defense. Indeed, visitors to the valley, from the earliest times up until just forty years ago when the first motor road to Kathmandu was completed (1959), unanimously condemned the miserable, rock-strewn, muddy track over two steep passes. It was impossible to ride a horse, far less drive a car or any other wheeled vehicle, over the passes. Foreigners and elites were carried in on the backs of lurching porters, or in swaying palanquins as was every single imported item, from tiny European gun-flints, to Jang Bahadur's four-ton equestrian statue.

With the fall of the xenophobic Rana dynasty (1846-1951), Nepal opened its doors to western influence and welcomed foreign aid to help with a new direction in modernization, a large component of which was infrastructure and in particular roads. Rankin et al. (2017:53) highlight this aspect writing:

> Building roads was quickly articulated as the fundamental development activity correlated with consolidating a modern bureaucratic state—and in [King] Mahendra’s formulation, forging national unity, *ràùñriya ekatà.* Transport was specified as the first priority of the Ministry of Planning and Development and the first five-year plan launched in 1956. It was considered fundamental to the basic governmental functions of administration and “promoting the people’s welfare” (NPC 1956: 21). In the subsequent two five-year plans, transportation and communication accounted for an astounding 39

percent and 37 percent of the national budget.

This was the beginning of an obsessive focus on road development linked to a nationalistic imaginary of a modern developed Nepal built on infrastructure financed by foreign aid. Indeed, "Not a single development plan has been issued that does not accord priority to road building, and on an average transportation and communication infrastructure has [sic] comprised 24 percent of the national budget over the thirteen plans that have been issued since 1956" (Rankin et al. 2017:43). Development became an overarching modernist Nepalese state project as well as a national identity embedded in citizens' consciousness through speeches, policy agenda, mass media, and textbooks. The Nepali word for development *bikas* effectively became a place marker dividing *bikasit* (developed) urban spaces vis-á- vis places that have not become *bikasit*—villages. As Pigg (1993:49) has argued:

> Coalescing over several decades and numerous political struggles, this rhetoric [of development] has come to equate the legitimacy of the government with national unity, progress, and patriotism itself. A particular arrangement for control over resources and political alliances thus became inextricably linked to the unassailable cause of national development.

In this context I employ Wilson's (2004:527) concept of roads as "regimes of territorialization" contrasting the predominant development planners' myopic focus on connecting two points on a map while ignoring the lived spaces in between (Beazley and Lassoie 2017). Wilson (2004:529) further agues this point suggesting that roads should be "visualized as stretched-out places where intersecting social relations cluster and adhere". This is particularly salient in this dissertation as I disentangle the failed trajectory of development in Nepal within contemporary "spaces of exception" (Ong 2006) that lay ostensibly outside state purview but solidly inside lived spaces of

gendered, hydro project, and disaster mobilities. All of these spaces are contested and negotiated re-organizing material and social landscapes previously set in historical state hegemonies of peripheral neglect. Hence, re-focusing frontier versus homeland perspectives (Kassam 2001) from the homeland and "reorganizing trajectories of political and cultural influence" (Mostowlansky 2014). Local subjectivities have flipped the equation 180 degrees voicing a statement we heard often when questioning our interlocutors about their future—they stated proudly, "In the future we will be more developed than Kathmandu!"

Dissertation Road Map

The introduction and conclusion chapters of this dissertation (*Chapters 1* and *7*, respectively) serve as bookends to three research chapters (*Chapters 4-6*). As bookends they hold the middle chapters together foregrounding them in the introduction and tying them together in the conclusion. Following the introduction, *Chapter 2* provides a literature review that serves as context for the development of a mobilities framework for the research chapters.

I developed this mobilities framework after modifying my original primary focus on gendered mobility during my field research period (April 2014-August 2015). After conducting numerous interviews, I began to see that focusing solely on gendered mobility was missing the whole picture. Tangled in gendered mobilities were other mobility-scapes that needed articulation to understand a comprehensive landscape that was embedded in Nepal's emerging hydropower development trajectory.

This 'panorama' was further complicated by three seminal events in 2015—the

Gorkha Earthquake Sequence[7], the promulgation of the new Nepalese constitution, and the subsequent blockade of the southern border.

After the earthquake I became involved in several earthquake relief initiatives that provided further material for my dissertation. This helped me understand and untangle a highly complex, convoluted, dynamic, and volatile mobility matrix that stretched from my research site at the Nepal-Tibet border in Rasuwa District along the Trishuli River Valley into Kathmandu. Then I went back again to the border during my volunteer efforts with Rasuwa Relief[8]—a grassroots self-organizing earthquake relief initiative. This proved both salient and corroborative as it followed the historical Trans-Himalayan trade route that features prominently in the legacy of the mobility corridor of my research area.

Many of the residents of Rasuwa that I had come to know and interview also followed this route after the earthquake as they migrated towards Kathmandu to seek medical attention, find temporary housing and shelter, look for relatives and loved ones, and seek the state's assistance in rebuilding their lives back in their homeland once the danger had passed. Travelling this route, I found empirically in-depth rich ethnographic vignettes that traced the footprints of the thousands of wayfarers who had historically travelled this same corridor—admittedly under much different conditions.

This all left a distinct indelible referent perspective in the way I began to conceptualize and untangle the mobility-scapes I had moved through in my fieldwork

[7] The Gorkha Earthquake Sequence is the term the scientific literature uses for the April 2015 magnitude 7.8 earthquake and its aftershocks.
[8] See Lord and Murton 2017

both as researcher and volunteer aid worker. The historical importance of this mobility corridor metaphorically qualifies it as a power corridor and the emerging hydropower trajectory materially does as well. Hence, the title of my dissertation, *Mobility Pathways: Mobile Lives in a Trans-Himalayan Power Corridor.*

It became obvious to me while analyzing my data that three distinct mobilities came to the foreground which articulated my findings and aided in untangling the labyrinth of imbricated lived mobility-scapes in which my data were embedded. These three mobilities I term gendered, hydro project, and disaster mobilities. I then conceptualized a framework that could encompass these mobilities within an overarching mobilities lens.

I argue that the mobilities framework I employ brings legibility to this necessarily 'messy', complex, and convoluted landscape providing purchase to analyze the frictions inherent in contested, dynamic, and volatile mobility-scapes. Using this framework, I show how a focus on mobilities can disentangle highly complex and contested development projects that from the outside appear as rational linear processes but inside are anything but that, as well as chaotic disaster landscapes, both embedded in gendered space.

In *Chapter 3,* I detail the methods used to collect data and situate the reader in the research site. My methods typify a social science qualitative mixed methods approach relying on in-depth interviews, semi-structured household surveys, and focus groups. After the earthquake my methods were arguably less conventional in that the earthquake was not originally part of my research design (for obvious reasons). Interestingly, while my observations after the earthquake were not preplanned (I did

not at the time see it as research) they fit solidly within 'unplanned' participant observation and add a reflexive element to my overall analysis.[9]

Chapter 4: Gendered Mobilities takes an arguably unconventional approach starting with the premise that many gendered mobility studies focus mainly on how women are excluded from mobilities. I choose to refocus this lens exploring how women's mobilities have been enhanced while at the same time pointing out where they are also excluded. Taking this approach, I fill a lacuna in the literature and call for some scholars to refocus their orientation given the plethora of literature situated in the inverse orientation—in fact *we need both perspectives*.

This chapter begins with a review of the literature on gendered mobility followed by a brief historical look at gendered mobility embedded in the Nepalese culture of the former Hindu Kingdom.[10] This context section serves as a backdrop for the Rasuwa local women's voices that follow, using intersectionality theory while tracing multiple converging mobilities, their hybrid spaces, and cascading effects. I argue that education is as a prime factor in shaping gendered mobilities with road, hydro project, and tourism mobilities contributing influential components.

A mobilities genealogy/history elucidates the many constituents that shape gendered mobility trajectories. Multiple gendered mobility pathways emerge among

[9] See Lord and Murton 2017 for in depth analysis of the 'academic-practitioner' non-interface we experienced within Rasuwa Relief.

[10] Here I use Nepalese culture to refer to the high caste Hindu state-making project that began after the unification of Nepal in 1768 by the Gorkhali monarch Prithvi Narayan Shah. This Hindu state-making project continued through successive Shah kings and prime ministers establishing Nepali as the national language, the civil legal code (*muluki ain*) based on the Hindu caste system, national holidays prescribed by Hindu festivals, and various governmental policies embedded in Nepalese Hindu ideology (Whelpton 2005).

trade-transport entrepreneurs, Nepalese and Chinese hydro project laborers and managers, financial institutions, and local inhabitants living along the Nepal-Tibet border.

Chapter 5: Hydro project Mobilities investigates a recent trend in the Trishuli Valley of Rasuwa District where hydro projects are constructing roads to local villages. Initially, a contextual section on roads and development in Nepal is presented to ground the chapter in an historical overview. This is followed by a brief explanation of hydro project benefit sharing mechanisms to help the reader understand why hydro projects are building local roads and contributing to other community development projects.

The main section of the chapter takes the reader inside village road committees' inner workings to investigate how the process of hydro project mobilities evolves. I show how this process varies from village to village and becomes a contested landscape inhabited by local villagers, hydro project bosses, security forces, and Langtang National Park administrators. I illustrate how local actors have negotiated the highly complex geopolitical and socioeconomic landscape of hydro project mobilities that are embedded with converging local landscapes of spatial reorientation, scales of migration, land speculation, and gifts of development. I untangle the asymmetrical messy spaces of modernist development trajectories in Nepal allowing local actors to elucidate the daily-lived experience of negotiating volatile and varied scalar, highly contested mobility-scapes, arguing that this process turns the tables on historical center-periphery asymmetries and carves out local agency landscapes.

Chapter 6: Disaster Mobilities takes a reflexive approach in examining mobilities in the aftermath of the 2015 earthquake, what has been called the Gorkha Earthquake Sequence. By analyzing the mobility pathways of several grassroots self-organizing volunteer earthquake relief initiatives, I argue that virtual mobilities[11] played a vital role in coordinating and facilitating these efforts which filled in the gaps left by dysfunctional state institutions.

I start by grounding the chapter in three earthquake case studies in Haiti, Japan, and Nepal analyzing how virtual mobility technologies helped carve out disaster mobility-scapes. I then add further context by examining earthquake awareness, [un]preparedness, and the governmental dysfunction that led to the rise of grassroots citizen responses to fill the void left by the state. Using the lived experiences of earthquake-affected persons, I reflect on my involvement with three aid initiatives as a volunteer followed by my experiences as a 'volunteer as patient' after becoming an 'accidental victim' (Beazley 2017).

This provides an inside view of the contested landscape of disaster mobilities as well as 'victims'' experiences negotiating the uneven terrain of medical treatment, emotional and psychological support, and post-operative rehabilitation. A reflexive analysis of persons with disabilities (PwD) highlights the challenges such individuals face while attempting to return to a 'normal' life post trauma.[12] In the end, I argue that the government would be wise to study the lessons learned by citizens' response to the

[11] Virtual mobility refers to how communication systems interact and influence physical mobility.
[12] Many people affected by the earthquake suffered traumatic injuries that left them either temporarily or permanently disabled. See Lord et al 2016.

earthquake as they attempt to 'build back better' in the aftermath of the disaster.

The final chapter (*Chapter 7*) revisits the previous chapters tying together the diverse aspects of gendered, hydro project, and disaster mobilities. In addition, I set these mobilities within the context of the three seminal events in Nepal during my research period—the earthquake, the promulgation of the new Nepalese constitution, and the conflict on the southern border in reaction to the constitution—bringing the dissertation full circle within the lived experiences of mobility-scapes of a tumultuous year in Nepal. Finally, I address future research needs, which are particularly salient during the present period of rebuilding following the 2015 earthquake and relevant for evolving mobility-scapes of Nepalese citizens and for the state as it pursues its development trajectory of becoming a "hydropower nation" (Lord 2016). Lastly, it addresses future concerns and research gaps concerning roads, gendered mobility, and disaster response that are important building blocks for the future growth of Nepal as it strives to become a vibrant bridge between China and South Asia.

CHAPTER 2
LITERATURE REVIEW and RESEARCH FRAMEWORK

Literature Review

The Mobilities Turn

Mobility is defined as "the movement of people from one place to another in the course of everyday life … the daily rounds of activities such as paid and unpaid work, leisure, socializing and shopping" (Hanson 2010:7). However, it is not just a physical phenomenon it is social as well. It is a daily activity that involves social interaction in specific contextualized locales.

In the 1990s, academics in the social sciences began to question some basic assumptions within their discipline. Chief among them is sedentarism, which was proximately derived from the Hiedeggerian idea of dwelling places, bounded spaces where people dwell, reside, feel at home, and peaceful.

> Circumspect heedfulness decides about the nearness and farness of what is initially at hand in the surrounding world. Whatever this heedfulness dwells in from the beginning is what is nearest, and regulates our de-distancing. (Heidegger 1953:100)

This concept infers sedentariness and its associations with short distance, static locale, stability, and fixed sense of place, as normal.

> As being-in-the-world, Dasein essentially dwells in de-distancing. This de-distancing, the farness from itself of what is at hand, is something that Dasein can *never cross over.*[13] (Heidegger 1953:100, emphases in the original)

[13] Dasein (German pronunciation: [ˈdaːzaɪn]) is a German word that means "being there" or "presence" (German: da "there"; sein "being"), and is often translated into English with the word "existence". It is a fundamental concept in the existential philosophy of Martin Heidegger, particularly in his magnum opus *Being and Time*. Heidegger uses the expression Dasein to refer to the experience of being that is peculiar to human beings. Thus, it is a form of being that is aware of and must confront such issues as personhood, mortality and the

The opposite then, long distance, on the move, and no one fixed sense of place or multiple senses of place is thought to be abnormal (Sheller and Urry 2006).

> In not-staying, curiosity makes sure of the constant possibility of *distraction.* Curiosity has nothing to do with the contemplation that wonders at being, *thaumazein,* it has no interest in wondering to the point of not understanding. Rather, it makes sure of knowing, but just in order to have known. The two factors constitutive for curiosity, *not-staying* in the surrounding world taken care of and *distraction* by new possibilities, are the basis of the third essential characteristic of this phenomenon, which we call *never dwelling anywhere.* Curiosity is everywhere and nowhere. This mode of being-in-the-world reveals a new kind of being of everyday *Da·sein,* one in which it constantly uproots itself. (Sheller and Urry 2006:161)

Sedentarism necessarily posits human identity in circumscribed place, bounded territories of scale from household, to community, region, and nation, and therefore a distinct entity for social science inquiry. This sedentary view of human identity can be traced back to the Enlightenment.

> Space is believed to be a zone of freedom. But like all aspects of freedom after the European Enlightenment, that zone is structured by property relations and contests between states and corporations for dominance and wealth. (Kaplan 2006:400)

Sedentarism became further embedded in human identity during the rise of the high modernist, state-directed application of scientific and technical innovations, creating a vision of a new Western society and later by the flurry of nation building following World War II (Scott 1998, 2009). Social sciences' fixation on sedentarism is perhaps best exemplified by its lack of recognition of the significance of one of the crowning achievements of high modernism, the automobile and the change in mobility it

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dilemma or paradox of living in relationship with other humans while being ultimately alone with oneself (Wikipedia https://en.wikipedia.org/wiki/Dasein).

inspired (Sheller and Urry 2000).

Nonetheless, a paradigm shift or 'turn' has been taking place since the 1990s ushered in by thinkers from many different disciplines in the social sciences. This growing movement has its foundations in the work of several individuals whose writings pushed the boundaries of sedentarism such as Marc Augé's (1995) *Non-places: Introduction to an Anthropology of Supermodernity*, Manuel Castells' (1996) *The Rise of the Network Society*, and James Cliffords' (1997) *Routes: Travel and Translation in the Later Twentieth Century*. In addition, Caren Kaplan's (1996) *Questions of Travel: Postmodern Discourses of Displacement* was a catalyst for looking at mobility through a gender lens. At the turn of the century condensed temporal spatial realities brought about by the components of globalization coalesced into a framework centered on mobilities as elucidated in John Urry's (2000) *Sociology Beyond Societies: Mobilities for the Twenty-first Century* and Victor Kaufman's (2002) *Re-thinking Mobility: Contemporary Sociology* (see Cresswell 2010). Urry's (2000) work examines the traditional concepts of society through the lens of state control, boundaries delimited by the state that control mobilities, to generate the concept what he calls "sociology beyond societies".

> In the final chapter an agenda for a *sociology beyond societies* is developed, organised around the distinction between gardening and gamekeeping metaphors. The emergence of gamekeeping involves reconsidering the nature of a civil society of mobilities; seeing how states increasingly function as 'regulators' of such mobilities; dissolving the 'gardening' distinction between nature and society; and examining the emergent global level that is comprised of roaming, intersecting, complex hybrids. (Urry 2000:5)

Urry (2007) delineates four distinct categories of mobilities (**Table 1**). He argues that social interactions posit various aspects of the movement and/or fixity of people,

concepts, items, and forms; therefore, different modes of mobility create different types of societies. In addition, he points out that there is a credo/ideology of movement as a basic human right enshrined in the UN Universal Declaration of Human Rights (UDHR) and European Union's Charter of Fundamental Rights of the European Union (CFREU).

> (1) Everyone has the right to freedom of movement and residence within the borders of each state. (2) Everyone has the right to leave any country, including his own, and to return to his country. (UN UDHR 1948 Article 13)

> (1) Every citizen of the Union has the right to move and reside freely within the territory of the Member States. (2) Freedom of movement and residence may be granted, in accordance with the Treaties, to nationals of third countries legally resident in the territory of a Member State. (EU CFREU 2007 Article 45)

Table 1 Categories of mobility (Adapted from Urry 2007)

Mobility	Characteristic	Examples/technologies
Capable	Being capable of movement, or having the property of movement, something that moves or facilitates movement	Mobile: people, phones, homes, hospitals, physical prostheses, societal class mobility as in the "new mobility" (Makimoto and Manners 1997)
Mob	Unruly, disorderly, no fixed boundaries, hard to regulate and requiring new forms of governance	Unruly: mobs of people, multitudes, smart mobs/flash mobs (Rheingold 2002)
Social	Social, vertical as in upward and downward social mobility, hierarchal, entangled interrelationships of physical motion and social mobility	The new Chinese billionaires, the rise of a middle class in India and other examples of the rising "virtual middle class" (Friedman 2013) such as in Egypt
Migration	Horizontal semi-permanent geographical movement of people, often involves movement to another country or continent due to economic, climatic, political, issues of conflict or other reasons	Environmental migrants (Brown 1976), migration for work, political migration (political refugees), diasporas, sex, food, and security (Idyorough 2008)

In the United States, we may have an assumed right of the freedom of movement, but there is no provision in the US Constitution or other laws that explicitly gives US citizens the right to freedom of movement (Wilhelm 2010).

The common ground for all these foundational works and the reason the mobilities turn is different from other approaches is the emphasis to begin from a perspective of being mobile rather than sedentary, of fluid rather than fixed, and of variable rather than circumscribed. The mobilities turn differentiates itself from previous geographies of inquiry by taking motion, a basic element of life, as its nucleus (Cresswell 2010). Urry (2007:18) argues that due to this different focus it elucidates hidden or subterranean "theories, methods and exemplars of research…." that previously were not seen. Theories involving the work of Latour (2005, 1993, 1990, 1987), Lefebvre (2004, 1991), Deluze and Gutterai (1988, 1986, 1983), Foucault (1976), Le Corbusier ([1931] 1986), Derrida (1987), and Durkheim ([1915] 1968, [1895] 1964) are just a few of the authors who mobilities theorists draw upon (**Table 2**).

Table 2 Authors and ideas that mobilities literature draws upon (Adapted from Urry 2007).

Source	**Idea used**
Bourdieu	*Habitus*, forms of capital, social agents, and social space
Castells	Network society, hierarchy, flexibility, information flows, and virtual travel
Derrida	Difference
Durkheim	Effervescence, social facts, and collective representations
Deluze and Guattari	Nomadism and de-territorialization
Foucault	Power, governance, territory, and subjects
Heidegger	Dwelling place and bridges
Latour	Circulating entities
Le Corbusier	Roads will be monopolized by cars
Lefebvre	Lived time in nature is being replaced with clock time, cars interrupt everyday life of pedestrian and lead to impersonal contact
Marx	Human/nature interaction, systems of movement, annihilation of space by time, commodities, and social relations and capital production
Scott	High modernity, modernity and order, and legibility
Simmels	Human social-spatial movements, interconnection of mobilities, complexity theory, and significance of vision and connection

This focus on motion as a lens to view life creates a framework that intersects other fields of research that formerly were bounded and allows for the creation of new

synergies that produce transformative theoretical and methodological vistas (Urry 2007). In addition, the mobilities turn recognizes coupled human and ecological systems (Chen 2015; Glaser 2012; Shutler et al. 2012; Liu et al. 2007a,b,c; Machlis, Force, and Burch 1997) and the interplay between the physical structures of mobility (roads, bridges, vehicles, etc.) and the aesthetic of the human experience thereby linking science, the humanities, and social science. The mobilities turn argues that mobilities are more than just functional, that the parts that make up mobilities include such entities as design, implementation, governance, meaning, politics, livelihoods, and ethics. Another difference is that mobilities encompass multiple scales of movement and forms, from walking to global economic and labor movements. This includes the way in which these forces interact and influence each other in relation to movement, and the politics of movement. Finally, it reemphasizes the need to transcend boundedness and a sedentary framework (Cresswell 2010).

In academic scholarship, the conceptual bookends of mobility are sedentary metaphysics and nomadic metaphysics. Sedentary metaphysics looks at the world in terms of a rootedness in a specific place.

> This is a sedentarism that is peculiarly enabling of the elaboration and consolidation of a national geography that reaffirms the segmentation of the world into prismatic, mutually exclusive units of "world order" (Smith 1986:5). This is also a sedentarism that is taken for granted to such an extent that it is nearly invisible. And, finally, this is a sedentarism that is deeply metaphysical and deeply moral, sinking "peoples" and "cultures" into "national soils," and the "family of nations" into Mother Earth. It is this transnational Cultural context that makes intelligible the linkages between contemporary celebratory internationalisms and environmentalisms. (Malkki 1992:31)

James Scott in *Seeing Like A State* (1998), delves into this type of sedentary

metaphysics as a tool used by the state to make citizens more legible[14] and therefore easier to control. In contrast, nomadic metaphysics sees the world in terms of a multiplicity of roots, which are in an ongoing state of change and with no one fixed point of origin.

> The nomad has a territory; he follows customary paths; he goes from one point to another; he is not ignorant of points (water points, dwelling points, assembly points, etc.). But the question is what in nomad life is a principle and what is only a consequence. To begin with, although the points determine paths, they are strictly subordinated to the paths they determine, the reverse of what happens with the sedentary. The water point is reached only in order to be left behind; every point is a relay and exists only as a relay. A path is always between two points, but the in-between has taken on all the consistency and enjoys both an autonomy and a direction of its own. The life of the nomad is the intermezzo. Even the elements of his dwelling are conceived in terms of the trajectory that is forever mobilizing them. (Deluze and Guttuari 1998:380)

The sedentarist moves in a space that has been strictly appropriated, each person has their own enclosed parcel. The space is necessarily fragmented by these

[14] In an interview James C. Scott elaborates on his use of the term legible saying, "State naming practices and local, customary naming practices are strikingly different. Each set of practices is designed to make the human and physical landscape *legible*, by sharply identifying a unique individual, a household, or a singular geographic feature. Yet they are each devised by very distinct agents for whom the purposes of identification are radically different. Purely local, customary practices, as we shall see, achieve a level of precision and clarity—often with impressive economy—perfectly suited to the needs of knowledgeable locals. State naming practices are, by contrast, constructed to guide an official "stranger" in unambiguously identifying persons and places, not just in a single locality, but in many localities using standardized administrative techniques (Scott 2010). For example, in his seminal book, *Seeing Like A State* (1998) he uses a picture of a "illegible natural" forest, which appears to be unmanaged, next to a "legible forest" that is managed in orderly rows with a straight pathway leading through it (1998:16-17). He further explains the term's link to sedentarism saying, "The more I examined these efforts at sedentarization, the more I came to see them as a state's attempt to make a society legible, to arrange the population in ways that simplified the classic state functions of taxation, conscription, and prevention of rebellion. Having begun to think in these terms, I began to see legibility as a central problem in statecraft. The pre-modern state was, in many crucial respects, particularly blind; it knew precious little about its subjects, their wealth, their landholdings and yields, their location, their very identity. It lacked anything like a detailed "map" of its terrain and its people" (2010:2).

parcels enclosed by walls, fences, and boundaries and is further fragmented by the roads that connect these spaces. The nomad moves in a space that is open, smooth, and indeterminate, with roads and paths that connect the open spaces rather than delimit and close the space (Deluze and Guattari 1998). The discourse around globalization borrows freely from nomadic metaphysics putting a positive spin in the name of progress on all things mobile. This is in contrast to the current negative discourse about illegal and undocumented immigrants and xenophobia toward Islam in the United States. It is possible to hold both views about different spaces at the same time without contradiction. For example, those in favor of closed borders for immigration but open borders for trade. Rarely are either metaphysics found in absolute form, usually falling somewhere on a continuum between the two (Cresswell 2006).

Nonetheless, metaphors about mobility have become the ubiquitous modern language just as the cell phone has become both the literal and metaphorical symbol. Take for example, the latest advertisement from Bavarian Motor Works (BMW)[15].

> **BMW i Concept.**
> BMW i stands for visionary electric cars and mobility services, inspiring design and a new understanding of premium that is strongly defined by sustainability. With BMW i the BMW Group is adopting an all-embracing approach, redefining the understanding of personal mobility with purpose-built vehicle concepts, a focus on sustainability throughout the value chain and a range of complementary mobility services.
>
> **The Future of Urban Mobility.**
> Spring 2008. A top-secret location somewhere in Munich, Germany. BMW's most innovative thinkers. And one ambitious goal: the radical reinvention of individual mobility in megacities.

The problem with using mobility as a metaphor as well as the 20th Century's

[15] http://www.bmw-i-usa.com/en_us/concept/

most potent male symbol of individual mobility, the car, is that it decontextualizes the gendered nature of mobility (Ganser 2009). In response to this misappropriation, feminists have criticized the use of this metaphor pointing out the basic flaw in this essentialist take on mobility and travel. Caren Kaplan (2006:401) contextualizes this flaw, "Light, sight, and travel become structuring concepts for this European Enlightenment subject, a subject that is arguably generically masculine, raced, propertied, and individualised in a legal as well as political, psychological, and philosophical sense."[16]

Research Framework: A Mobilities Framework

Justification

In my original research proposal, I focused on only gendered mobility, the purpose of which was to add a new element to my MS research on expanding rural road networks in Nepal. Interestingly, as I became more familiar with my research area I discovered that gendered mobility was intricately connected to other mobilities and to only address gender issues would limit telling the whole story of the mobility matrix. It would in essence essentialize a much more complex system and obscure the synergies and dynamics of a mobility power corridor. Hence, I conceptualized a framework to analyze this corridor from the much wider mobilities paradigm of which gendered mobility is one part. This process began in the field in stages as I interacted with hydro project-affected

[16] In this quotation when Kaplan writes "for this European Enlightenment subject" the subject she is referring to the European traveler citing the hot air balloon as an example of this view, "The hot air balloon is emblematic of the emergence of this new view of the world generated during the European Enlightenment" (Kaplan 2006:401).

people (the majority of people in my research area) and progressed to another stage during my involvement with volunteer aid after the 2015 earthquake and my subsequent vehicular accident.

Post-earthquake experiences positioned me to understand disaster mobility not only as a volunteer aid respondent but also as a 'victim' participant as I was in numerous hospitals with earthquake-injured people with similar injuries (*Chapter 6*). During my post-surgery periods I was able to reflect more on my framework to develop it further. As I began coding my interviews and reflecting on my data the refinement process deepened. Interestingly, the accident, while regrettable, widened my perception of mobility especially in the realm of disabled persons' mobility—a type of mobility many earthquake-injured Nepalese found themselves negotiating after the earthquake.[17]

I argue that the breadth of my experiences during my research gathering and post-earthquake, post-accident gives me a unique and deeply informed background from which to develop my mobilities framework. Finally, I employ my mobilities framework to bring clarity to necessarily messy, complex, and convoluted processes, providing traction to analyze the frictions inherent in state making trajectories and in places that have been historically ignored by the state.

Conceptual Framework

I started conceptualizing an overall mobilities framework in the field after

[17] Due to the trauma injuries many Nepalese incurred during the earthquake many became disabled persons, using crutches, prosthetics, and wheel chairs to be mobile. See Lord et al 2016

I became familiar with the connection between roads and hydro project development and being involved in my mobile methods.[18] As I was moving by various mobile means (foot, bus, horse, motorcycle, jeep), I would meet villagers I knew using some of these same mobilities and often more than one of them. I began to think in terms of mobility to interpret events happening around me and connecting them to themes in my interviews. Mobilities became a way of interpreting and relating. As Adey (2010:xvii-xviii) has pointed out:

> Before I go into this any further, I'll pin myself down to one escapable truth of mobility: in all its various guises, definitions, approaches, from the most abstract understanding, mobility at least for me, is a relation. In fact, borrowing from Lois McNay (2005:3) I reckon it is a *lived relation*; it is an orientation to oneself to others and to the world. Just as Nigel Thrift (1996) outlines mobility as a particular 'structure of feeling', the mobility of something moving through space seems to provide a very certain kind of position, standpoint or way of relating - it is a way of addressing people, objects, things and places. It is a way of communicating meaning and significance, while it is also a way to resist authoritarian regimes. It is the predominant means by which one engages with the modern world. It is a way to bond with one's friend, while it could be the means to threaten a boundary. In a certain sense then, mobility appears much like a notion such as space or time ubiquitous; it is everywhere. It might even be found in everything. But importantly it is most always born in relation to something or someone.

[18] Mobile methods refer to various methods social science researchers use to understand mobility (see Büscher, Urrey, and Witchger 2011). One such method is the go-along, which Kusenbach (2003:455) describes "as a qualitative research tool", writing the following about the go-along. "What sets this technique apart from traditional ethnographic methods such as participant observation and interviewing is its potential to access some of the transcendent and reflexive aspects of lived experience in situ". Of these various mobile methods, mine included ride-alongs, walk-alongs, and shadowing, where I tried to get a better understanding of individuals mobility by walking with them and riding along with them in buses, micro-vans, horses, bicycles, and motorcycles. I also employed what I call mobile reflexive extrapolation in which in lieu of a participant to travel with or traveling on my own to interview subjects I would use various vehicles locals use such as buses, micro-vans, and motorcycles (or walking) using my own experience to inform my understanding of locals' experiences of mobility.

I determined to make categories to sort out these mobilities. The categories are descriptive of the underlying function that the particular mobility serves/facilitates. And it is acknowledged that mobilities often overlap with other kinds of mobilities and in time and space. For example, walking is a physical mobility and at the same time it is contextual, it is done for a purpose, it has meaning. As Adey (2010:36) explains, mobility "is *given* or inscribed with meaning. Furthermore, the way it is given meaning is dependent upon the context in which it occurs and who decides upon the significance it is given". Walking could be done to visit a neighbor, to go to school, to go to a job, or to move away from the danger of a landslide. Each of these different meanings or purposes falls into categories that can help us better understand mobilities and how they work.

I have chosen the following spheres as categories to help make mobilities more legible: socio-economic, socio-cultural, socio-political, and environmental. Obviously, some of these categories can overlap as meanings and purposes often do. Within each of the four spheres are specific mobilities. Each mobility has human agents who energize the mobility as well as motivators and potentialities related to the mobility pathway. During my data analysis I identified seventeen mobilities that are emblematic of the complex intersecting mobility pathways in my research area. I have chosen twelve of the seventeen that best fit the three research chapters (*Chapters 4, 5, and 6*) (**Table 3**); and for the purposes of this dissertation I have chosen the three most robust mobilities (hydro project mobilities, gendered mobilities, and disaster mobilities) for chapters three, four,

and five, respectively. Each of these robust mobilities interacts with other mobilities in dynamic tension that produces further mobilities and potentialities.

Below I introduce four mobilities concepts that help elucidate the complex synergies of mobility interactions. But before introducing the concepts, it is important to define terms that will be used to explain them. Mobilities are embedded with constituents, or elements that make up the composition of each mobility. I conceive the following terms for these constituents.

Embedded Constituents

Agents/Actors

Agents/actors are the human actors who use and energize mobilities. For example, agents in the hydro project mobility are made up of laborers, support staff, truck drivers, engineers, administrative staff, and managers.

Components

Components are material and virtual mobility technologies that facilitate the mobility. For example, the component vehicles in hydro mobilities, necessarily includes mobilities that vehicles use such as roads, as well as hydro project technologies including tunnels, turbines, transmission wires, and various virtual mobility technologies such as cell phones, computers, and the Internet.

Motivators

Motivators are forces that enliven agents to move—to begin their mobility pathway**.** For example, a laborer in southern Nepal wishing to find a higher paying job decides to look outside his area for a more lucrative job.

Table 3 Mobilities Framework

Mobility	Components	Agents/actors	Motivators	Potentialities
1 Road	Vehicles	Anyone using the road	Hydropower development, border security, connectivity, under development	Energy security, development, national security, national integration
2 Hydro project	Vehicles and hydro project technologies	Laborers, managers	Electrical outages, underdevelopment, modernity	Energy security, development, national security
2 Gendered	Education, scooters	Women, girls	Sexual harassment, poverty, independence	Gender equality, women's empowerment personal safety, economic empowerment
4 Disaster	Natural disasters, earthquakes, landslides, etc.	Disaster-affected people, disaster aid volunteers, police, army, armed police	Disaster trauma, homelessness, family separation	Health, shelter, security, safety, recuperation
5 Virtual	Cell phones, Internet, computers, GIS	Anyone with virtual mobility technologies	Communication	Human connection, human relations
6 Education	Schools, colleges	Students, teachers	Knowledge	Women's empowerment, economic empowerment
7 Trade-Transport	Vehicles, commodities	Entrepreneurs, truck drivers, truck porters	Markets, commodities	Economic empowerment
8 Migration	Roads, trails, vehicles, and airplanes	Wage laborers, disaster 'victims', hydro laborers, trade-transport laborers	Unemployment, natural disasters	Economic empowerment, escape danger
9 Border	Customs and immigration facilities, and border security	Customs and immigration officials, police, army, armed police	Trade-transport, national security	Economic empowerment, national sovereignty
10 Employment	Jobs, workers, materials	Employment seekers	Unemployment, debt	Economic empowerment, debt reduction
11 Tourism	Roads, trails, and vehicles	Trekkers, tourists, off-road enthusiasts	Natural beauty, religious pilgrimage, salvation, stress	Personal fulfillment, religious merit, and stress reduction
12 Economic	Financial capital	Employment seekers, entrepreneurs, financial sector managers, employees	Financial gain, debt	Economic empowerment, debt reduction

Potentialities

Potentialities are the forces that entice agents toward them along their mobility pathway. In the above example the laborer who hears about new hydro project labor job opportunities in the Trishuli Valley begins his mobility pathway toward the Trishuli Valley.

Now I turn to defining the four main mobility concepts: coupled, convergent, hybrid, and/or cascading

Mobility Concepts

1) Coupled

Coupled mobilities are mobilities in which one mobility is dependent on the other. Road mobility is one of the most potent mobilities that other mobilities are coupled to. In this dissertation there are many examples but none more robust than the hydro project-road coupling. An access road is a necessary precursor for developing and constructing hydro projects. This will be dealt with in greater detail in *Chapter 4*. In fact, if we extend the definition of road to include trails and pathways almost all other mobilities in this dissertation are coupled to roads in some way.

2) Convergence

Converging mobilities are mobilities that overlap but are not necessarily dependent. An example of converging mobilities is the trade-transport mobility overlapping with in-migration for wage labor mobility (for simplicity I call this the migration mobility). There can be multiple overlapping mobilities such as trade-transport, migration, and (international) border mobilities. Another layer

can be added to the above example if we introduce the border citizen card mobility (*Chapter 5*).

3) Hybrid

Mobilities contain numerous embedded agents and properties that can include economic, cultural, socio-political, and environmental aspects as well as technologies. For example, the border mobility is embedded with numerous state agents (socio-political) including civilian police, army, armed police, and customs, immigration, and quarantine personnel. Each of these state agents comes from a particular socio-cultural subjectivity and we know that in Nepal most administrative positions especially at the level of border control or army commander come from the high caste Hindu socio-cultural group. In terms of technologies the border mobility is imbedded with cell phones, Internet, computers, vehicles, arms, scanners, and what I call state legibility technologies such as import-export regulations, visa requirements, and illegal substance bans and penalties. The above is an example of the hybrid space of border and virtual mobilities. These hybrid spaces produce a very rich environment to produce new mobilities and reproduce existing mobilities. In this sense there is a process of cross-fertilization that takes place when mobilities converge.

4) Cascading

Cascading mobilities appear when converging and coupled mobilities with their hybrid spaces reach a critical mass and begin creating similar mobilities or hybrid mobilities as a result of their momentum—in a sense cascading into new areas/spaces. A good example of this is the burgeoning hydropower development

in the Trishuli Valley. The first hydro project in the valley came coupled with the first road in the valley in the 1960s. As the road moved up the valley, feeder roads were developed to access the Chilime Valley for the Chilime Hydro Electric Project (HEP)[19] in the late 1990s. The success of this project spurred a number of new roads to access other hydro project sites to the point where there are currently (2018) at least twenty-five hydro projects at different stages of licensing, construction, or completion.

Mobility Pathways

In this section I define and explain the particular mobilities that I use as elements of analysis in the following chapters. I use the word 'pathway' in the title borrowing from Saxer (2016:105) to illuminate what I argue is an inherent quality of mobilities in my research area. As he explains:

> I use the term pathways to describe a configuration that is at once geographical and social. A pathway is thus not just another word for trade route. While trade is often an important dimension of life along a pathway, it is all but one mode of exchange. Life along a pathway is shaped by things, stories, rumors, and people passing through—by motion, or by flows, if you will. However, a pathway is neither just another word for flow. While shaped by motion, pathways are also conditioned by terrain, infrastructure and environmental factors like climate and weather. Connections across the Himalayas follow valleys and passes; they are transformed by roads and border posts; and they are affected by landslides and snow.

Saxer's concern with trade routes is particularly prescient for my mobilities framework because the Trishuli Valley was one of the two most popular trade routes during the period of Trans-Himalaya trade and was also a vector for the

[19] The abbreviation HEP will be used for all hydroelectric projects in the remainder of this dissertation.

three Nepal Tibet wars. It has seen periods of intense trade and periods of very little trade. Currently there has been a revival of trade in the Trishuli Valley with the opening of the China Nepal border crossing at Rasuwagadhi in December 2014 for both trade and tourism. Initially tourist permits to cross the border were not available for Westerners, but as of August 2017 this restriction has been lifted. It would be tempting to consider mobilities as centered around trade but as Saxer (2016:105) cautions "it is all but one mode of exchange"[20].

The individual mobilities explained below tease this out to trace other modes of exchange that have taken place in the valley during periods when trade was negligible. Saxer goes on to make several other important points about the concept of pathways. He argues that, "the concept renders visible socio-spatial relations within borderlands as well as interrelations between them" (Saxer 2016:105). Indeed, from the gaze of Kathmandu the Rasuwagadhi border is the frontier—a remote place full of potential for hydropower development, trade and transport commerce, and tourism. From the perspective of the villagers along

[20] Saxer explains this in more detail writing, "While geopolitics, trade regimes, and global markets are volatile and create shifting opportunities, a pathway is embedded in a particular landscape and topography, which makes it relatively resilient. At times, it may be dormant, at other times more vibrant. Yet, afforded by terrain and made by movement, pathways have the capacity to survive centuries and resurface as crucial sites of socioeconomic exchange at different historical conjunctures. As sites of bundled lines of exchange, they structure orientations, ambitions, and social relations. They continue to shape the Himalayan experience of remoteness and connectivity until the present day. I argue that the notion of pathways is good to think with for three reasons. First, it sheds light on partial continuities and the different temporalities of change whereas teleological assumptions engrained in center-periphery thinking tend to foreground a singular big transformation from tradition to modernity. Second, the concept renders visible socio-spatial relations within borderlands as well as interrelations between them. And third, the notion of pathways evokes a field site and suggests a methodological approach to the study of remoteness and connectivity." (2006:105).

this border it is a homeland and Kathmandu appears to be the distant Mecca from which the extractors come to inhabit and profit from their homeland.

This notion of homeland versus frontier (Kassam 2001) is extremely useful in turning our heads to experience the relational aspects of the different agents' perspectives imbedded in these mobilities. The Kathmandu-based truck driver sees the border as the temporary frontier node on his pathway to fill his truck with the Chinese supplies, he will make a profit from after he returns home. The border villager who has sold some land to the hydropower company and bought a truck that he now rents to the hydropower company sees himself enriching his home by profiting from the Kathmandu elite hydropower *thulo manches* (influential/big men). And yet as Saxer points out there are much more than just the two nodes of Kathmandu and Rasuwagadhi. The pathway encompasses all the places in between and their gaze of homeland versus frontier. In this way the pathway is not just a transportation corridor but also a lived environment.

Furthermore Saxer (2016:105) suggests, "the notion of pathways evokes a field site and suggests a methodological approach to the study of remoteness and connectivity". It is within this context of pathways that I will now define the specific mobilities I conceptualize for my analysis (see **Table 3**).

1) Road Mobility

Roads are recognized by many to be a precursor to economic and social development although this has also been shown to not always be the case (Beazley and Lassoie 2017). Roads are an extension of trails and hard tracks that

can increase the speed and volume of people, vehicles, and commodities that use them for mobility. In either case for the purposes of this dissertation they are taken to be one of the fundamental underlying layers of mobility. In many cases they are coupled with other mobilities such as the hydro project mobility.

2) Gendered Mobility (*Chapter 4*)

Gendered mobility has to do with the difference between men and women's mobility. For the purpose of this dissertation I will refer to gendered mobility as mostly female mobility unless otherwise noted.[21]

3) Hydro project Mobility (*Chapter 5*)

Hydro project mobility is a system that involves several different aspects of mobilities. The fact that hydro project and road mobilities are coupled is the first aspect of hydro project mobilities. Before you can have hydropower development you need an access road. After the access road is built it may be extended for other projects or to connect villages or to start new roads. Second the mobility of the water is harnessed to produce electricity. The flow is tunneled

[21] I chose to focus mainly on female mobility because there is a general assumption in Nepal that women have less mobility than men. This assumption is based to a certain extent on observation of Hindu women and to the homogenizing effect of historically high caste Hindu norms of female seclusion and male dominance. In urban areas such as Kathmandu where women up until recently used mainly public transport as part of their daily routine this homogenization of high caste Hindu norms tends to have a ubiquitous effect on women's mobility whether they are Hindu or non-Hindu. My research for *Chapter 4* centers on an area near the Tibetan border in Rasuwa District approximately 150 km northwest of Kathmandu. In this area the inhabitants are mainly Tamang and Tibetan Buddhists whose gendered norms differ significantly from Hindu gendered norms. I chose to focus on female mobility in this area to draw out differences in perceptions and practices of female mobility. Male mobility is more or less a given and with the wave of outmigration of working age males to the Gulf Countries for the past several decades male mobility has been studied in the literature extensively. In other words, I chose to study female mobility in the border area of Rasuwa District because it is under studied.

and channeled to the powerhouse altering its original mobility flow. In some cases, it is impounded and stored until its mobility is needed again. Electricity is essential for many other forms of mobility such as virtual mobility technologies, providing traffic signals and lighting on roads, and is intimately imbedded in the processes by which roads are both initiated and eventually paved. Electricity is also essential for economic mobilities, which influence almost all of the other mobility spheres. Again, here we can see the embedded relationality of mobilities.

4) Disaster Mobility (*Chapter 6*)

Disaster mobility traces out the pathways that disaster-affected people carve out to move to places of safety and security as well as to seek medical interventions.

5) Virtual Mobility

Virtual mobility refers to how communication systems interact and influence physical mobility. Virtual mobility technologies include cell phones, computers, and the Internet.

6) Education Mobility

Education is a mobility because it has a physical component where students must be mobile to attend school. It also is a mobility because it increases knowledge, which can have effects on a number of mobile aspects such as mobile imaginations where people think of new places they have learned about and what it is like there. Learning to read and write (literacy) flows over into numerous other mobilities such as virtual mobility—the ability to use cell phones, the computer, and the Internet for communication and further education. Education

also opens opportunities for employment that can lead to both physical mobility to the job site and economic mobility benefits. Gender equality has a very strong educational component.

I argue that education is one of the single most important interventions for gender equality. Why? Because it can open one's mind to many things that make the world of opportunities appear much bigger and see a world beyond them. It gives students the ability to read and write which opens up a huge world of information to them. This provides a space to become more informed about gender equality and a better platform from which to work for gender equality as well as greater livelihood and economic options and opportunities (*Chapter 4*).

7) Trade-transport Mobility

This mobility involves the movements of people, goods, and money involved in trade and transportation. In the Trishuli Valley this mobility has a long and famous history as noted above. The historical importance of this system is embedded in the founding of Nepal as a nation. The Gorkha kingdom cut off all the trade routes into and out of the Kathmandu Valley forcing the three kingdoms of Kathmandu to surrender and unite under the Gorkha king.[22]

8) Migration Mobility

Migration mobility concerns peoples' movements over long and short distances in support of their livelihoods. In my research area, the Tamang have traditionally practiced vertical migration as part of their transhumant agro-

[22] This was followed by a period of isolationism where Nepal cut itself off from the British influence in India as well as the rest of the world (see Whelpton 2005).

pastoralist livelihoods. They have also, like many Himalayan people, migrated during the slack winter months to take part in trade or small businesses (Campbell 2011). Since the coming of the new road extension from Syaphrubesi to Rasuwagadhi and the subsequent hydropower development, there has been a huge in-migration trend to work in both the hydropower sector and the border trade sector. For the last three decades (since the 1990s) Nepal has experienced significant out-migration seeking wage labor in the Gulf Countries (Sijapati, Bhattarai, and Pathak 2015).

Migration mobility can also be due to natural disaster, but I chose to give disaster mobility its own category, as it is the primary subject of *Chapter 6*.

9) Border Mobility

Border mobility concerns movement around and across borders, and security forces associated with them. In terms of this dissertation it is the Nepal China border at Rasuwagadhi. Even though the border is at Rasuwagadhi the border mobility stretches more than 40 km south of the border due to at least eight different security check points with police and military personnel present to stop vehicles and people that might be smuggling illegal substances such as sandalwood, red panda skins, and gold. Security mobility is a subfield of border mobility. Security mobility is concerned with state actors who provide security services according to state laws. This would include police, army, and other security personnel. Security mobility is legible within border mobility.

10) Employment Mobility

Employment mobility is concerned with mobility enacted to obtain a job.

This can be local or long distance, domestic or international.

11) Tourism Mobility

This concerns mobility associated with tourism. It also can be local or long distance, domestic or international. In my research area it is mostly centered on Langtang National Park and the Tamang Heritage Trail. Trekkers come from Kathmandu by road and then walk on trails to experience the mountains and culture in the area. This mobility can also apply to religious tourism; tourists who come to the area to visit sacred sites.

12) Economic Mobility

Economic mobility is enacted when there is some economic potential that attracts mobility toward it. One example of an economic mobility is the trade and transport mobility. Another is the tourism mobility. In fact, many mobilities may have an underlying economic factor such as hydro project mobility.

CHAPTER 3

METHODS

As noted in the previous chapter, once I was in the field the scope of my research widened to include hydro project mobilities and disaster mobilities. In the following section I familiarize the reader with the location and the human and biophysical characteristics of the research site.

Research Site

The primary vectors for my study are mobility corridors in the material form of roads and trails. In the Trishuli Valley this included the Pasang Lhamu Highway and its recent extension from Syaphrubesi to the Chinese border at Rasuwagadhi, the Betrawati Hakubesi road[23], the Samdong road, and the Tamang Heritage Trail (**Figure 3.1**). The Trishuli River forms the western boundary of Langtang National Park, which was established in 1976 as the first Himalayan national park. All of the villages along Pasang Lhamu Highway (until it crosses the Trishuli River at Syaphrubesi), starting from Ramche north to Rasuwagadhi, fall within the Park. Villages where I conducted interviews inside the Park include Dhunche, Thulo and Sano Bharku, Thulo Syaphrubesi, and Old Syaphrubesi. Villages on the west side of the Trishuli River fall outside of the Park. Villages interviewed on this side along the road include Syaphrubesi, Timure, Ghattekhola, and Rasuwagadhi. Villages along the Tamang Heritage where interviews were conducted include Briddhim, Lingling, Thuman,

[23] In the future the Betrawati Hakubesi road will be extended upriver to connect to Syaphrubesi and become the new route for the Pasang Lhamu Highway.

Nagthali, Tatopani, Chilime, Thambhuchet, Goljung, and Gatlang. Research villages along the Betrawati Hakubesi road included Shanti Bajar, Archale, Simle, Mailung, and Hakubesi (**Figure 3.1**).

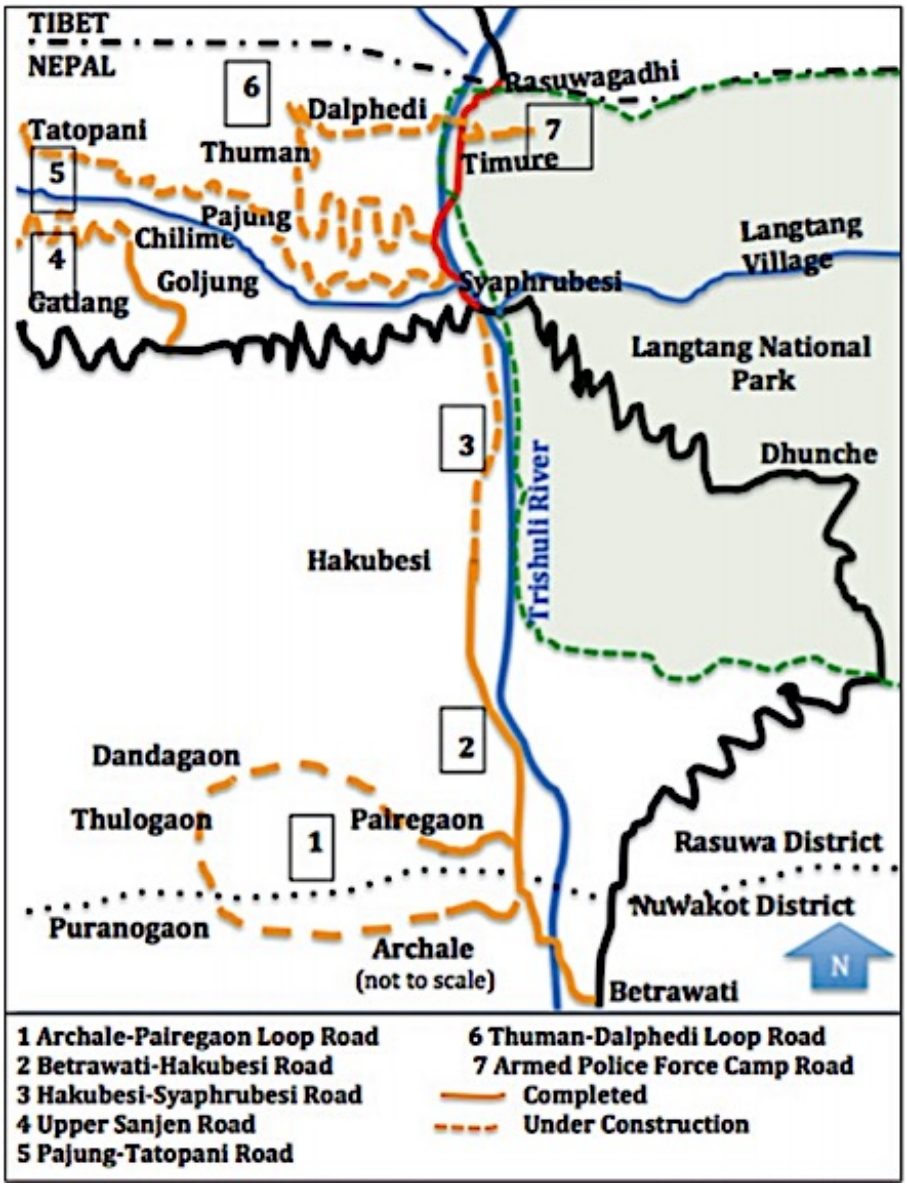

Figure 3.1 Research site with roads and hydro projects (from Beazley and Lassoie 2017)

Human and Biophysical Characteristics

Rasuwa district is approximately 120 km northwest of Nepal in the central

development district and province three of the new Federal States of Nepal (**Figure 3.2**) according to schedule four of the new constitution of Nepal, adopted on 20 September 2015. The district is approximately 1500 km^2 transitioning from subtropical lowlands to high altitude Trans-Himalaya including approximately 379 km^2 forest land, 260 km^2 grass/bush land, and 119 km^2 cultivated land (Dong et al. 2009). The population of Rasuwa is 43,300 according to the 2011 census.

Figure 3.2 Nepal's seven federal provinces with Rasuwa District (Adapted from Wikipedia)

The majority of the inhabitants of the district belong to the Tamang ethnic group with the Chettri Hindu caste group making up the second largest group, followed by Brahmin (CBS 2011). During the closing of the border between Nepal and China in the 1960s, many Tibetan refugees crossed into Rasuwa leading to the establishment of multiple Tibetan refugee camps in the area. Historically the Tamang have practiced agro-pastoral transhumance, with tourism opportunities arriving in the 1970s when the Langtang National Park was established as well as the more recent

Tamang Heritage Trail in 2002 (TRPAP 2007). Several decades ago out-migration for wage labor in the Gulf States became one of the main alternative livelihoods for working age males and some females in Rasuwa.

To understand the salient characteristics of the research site a more in-depth look at historical and contemporary aspects of the Trishuli Valley, what I call a Trans-Himalayan power corridor, is presented below.

Trans-Himalayan Power Corridor

I use the name Trans-Himalayan power corridor for the Trishuli Valley to emphasize several layers of meaning (metaphorical and material) attached to the importance of the Trishuli Valley. I will continue from here with a historical sketch of the Trishuli Valley corridor.

Historical Context

Stretching from the Kyirong (Tibetan *sKyid rong*) Valley translated as 'Happy Valley'[24] of the *Mang-yul*[25] *sbas yul* (*beyul*)[26] in the former Tibetan Kingdom of *Gung-thang*[27] (13th to 15th Century CE) south through the valley of Shiva's trident (*Trishuli*)[28]

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[24] *sKyid rong* Tibetan name pronounced Kyirong meaning "Happy Valley".
[25] *Mang-yul* is the Tibetan name of a valley (extending north from the present-day Nepal-Tibet boundary at Rasuwagadhi) in the ancient Tibetan Kingdom of *Gung thang*.
[26] *sbas yul* Tibetan word, pronounced *beyul* meaning "hidden lands" refers to valley sanctuaries which according to legend were hidden away by the great Buddhist tantric adept Padmasambhava to be used in times of need. "The hidden land is both a refuge for meritorious individuals from all strata of Tibetan society during a time of moral and political degeneration, as well as a place of accomplishment for those who are spiritually inclined. It is a land where the yogi can spend extended time in retreat and where a *gter-ston* can reveal sacred treasures." Childs 1999:128) *gter-ston* Tibetan pronounced terton refers to a treasure revealer of sacred texts hidden by Padmasambhava and his consort Yeshe Tsgoyal.
[27] *Gung thang* Kingdom was founded under Sakya rule in the 13th Century CE by Bumdegon (1253–1280) and lasted until 1620 when the King of Tsang conquered it.
[28] *Trishuli* Sanskrit meaning the Hindu God Shiva's trident.

lies an ancient mobility corridor that has witnessed a colorful cast of characters that date back in recorded history to the Tang Dynasty (618–907 AD) (**Figure 3.3**). A stone inscription in present day Kyirong (a.k.a. Gyilong/Gyirong) County of the Tibet Autonomous Region (TAR) dated 658 from the Tang mission to India bears witness to one of the first documented Sino-India diplomatic missions as well as to the reputation of this trans-Himalayan corridor (Lanxing 1992).

Figure 3.3 Historical map of Trishuli Valley (Adapted from Beazley and Lassoie 2017)

Owing to its relatively low over all elevation and proximity to Kathmandu in comparison to other trans-Himalayan corridors it was often the prime route of choice in the middle Himalaya for north south trans-Himalayan movement. It was both highway and Internet as trade and pilgrimage transferred goods and information along its path. Cultural influences and technologies including papermaking, printing, Nepalese Newar architecture, the beginning of the Tibetan written script, and the first

and latter transmissions of Buddhism to Tibet travelled along this corridor. A colorful cast of characters was instrumental in carrying these and other cultural catalysts. Princess Bhrikuti, Padmasambhava, Sakya Pandita, Atisha, Milarepa, the Madman of Tsang (Tsangnyon Heruka), Malla Kings, Qing Empire Imperial troops, Jung Bahadur Rana's Gorkha royal assassins, the zombie slayers of Langtang, the Great Trigonometric Survey Pundits, Heinrich Herrar, Peter Aufschnaiter, and many other luminaries' footprints are embedded in this Trans-Himalayan power corridor as emissaries of these cultural transmissions (Beazley forthcoming).

> Over the centuries, Mangyul-Gungthang has been an important gateway between the north and the south of the Himalayas, traversed by the main route between Tibet and Nepal, which passed through the Kyirong valley and led to Kathmandu. This was, at times, also an important route between China and India. The area is known from documents and inscriptions that go back to the imperial period (the sixth to ninth centuries). On an overhanging rock not far from the ruins of the royal palace is a Chinese inscription left in 658 by Wang Xuance, a diplomat of the Tang imperial court who passed through on his way to and from India. (Diemberger 2007:34)

While its historical importance can already be seen from the brief passage above a closer reading of several historical precedents lends further credence to my claim of the Trishuli Valley as a Trans-Himalayan power corridor.

Two main routes to Kathmandu were used for the Trans-Himalayan trade one in the Trishuli Valley the other in the Bhote Koshi Valley east of Kathmandu along the approximate route of the current Arniko Highway (**Figure 3.4**). Kathmandu's control of these routes allowed their leaders to extract heavy taxes on trade goods establishing their power dominance in both trade corridors.

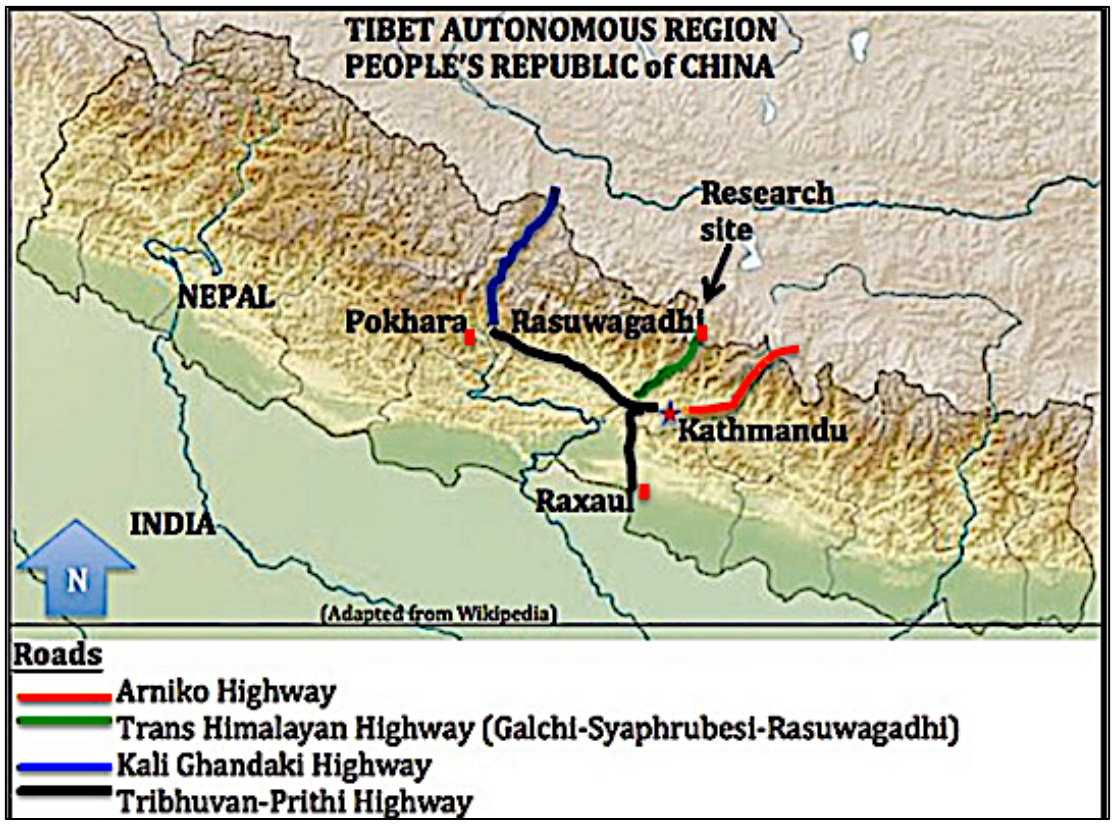

Figure 3.4 Trishuli Valley trade route (Trans Himalayan Highway) and Arniko Highway trade route (from Beazley and Lassoie 2017

The importance and power of these two trade routes is writ large in the founding of Nepal as a kingdom in the latter half of the 18th Century. Gorkha king Prithvi Narayan Shah took control of both of these routes laying siege to the Kathmandu Valley, thereby forcing the kings of the Kathmandu Valley to surrender and subsequently establishing the Gorkha Kingdom, later called Nepal (Whelpton 2005). Both of these routes were also used during the three Nepal Tibet Wars (1788, 1791, 1856).

During the second war Qing Dynasty Imperial troops crossed the border at Rasuwagadhi and fought their way down the Trishuli Valley to Betrawati, only a days' march from the capital. This resulted in a humiliating defeat of the Gorkha army and

the signing of the Treaty of Betrawati (Upadhya 2012). The treaty required Nepal to pay an annual tribute to the Chinese emperor and at least one of these tribute missions in 1795 followed the Trishuli Valley route to Rasuwagadhi across the border to Kyirong and on to Peking (Manandhar 2000) (see **Figure 3.1**). Nepal's control of these two trade routes stymied the East India Company's desires to expand their trade north, which eventually led to the Younghusband British mission to Lhasa (1903-04) and opened up a more direct route for the Company through the Chumbi Valley in present day Sikkim (Harris 2013).

The present-day history of the Trishuli Valley also speaks to its status as a Trans-Himalayan power corridor in terms of hydropower. The first road built into the Trishuli Valley in the late 1950s was specifically built to construct the Trishuli HEP (Basynet 1989). As this first road made its way further north it became instrumental in the development of the Chilime HEP and subsequently numerous others have been initiated in the Trishuli Valley including the Rasuwagadhi HEP, the Trishuli 3A and 3B HEP, the Upper Trishuli HEP, and the Mailung HEP (Lord 2016). In total there are twenty-five hydro projects, four in operation, four under construction, and seventeen in some stage of licensing in the Trishuli Valley and its tributaries. In terms of a trade power corridor its former reputation has been revived by the opening of the Rasuwagadhi border crossing (2014), which currently (2019) is the only official Nepal China border crossing as the Arniko Highway border crossing at Kodari has been closed due to the earthquake and subsequent flooding damage.

The closing of the Arniko Highway has also made the Trishuli Valley the primary overland route for tourists and religious pilgrims travelling to Tibet and for

Chinese tourists visiting Nepal. Chinese tourists now comprise the second largest group of tourist arrivals in Nepal (104,005), second only to India (118,249) (GoN 2016). In the future there are plans for a Trans-Himalayan railway to come down the valley from Kyirong through Rasuwagadhi to Kathmandu and on to Lumbini near the southern border with India. This highlights the geopolitical power aspects of the Trishuli Valley and is well known to be making Delhi nervous (Dixit 2016). The strategic importance of the Valley is also evidenced by the plethora of security details along the route. There are at least eight different checkpoints staffed by a combination of army, civilian police and armed police forces and their respective compounds/barracks. Hence, I argue that labeling the Trishuli Valley a Trans-Himalayan power corridor is indeed apropos.

Data Collection

The data for this research were gathered from April 2014 through August 2015 in twenty-two villages in the upper Trishuli Valley. In addition, post-earthquake interviews were conducted in Kathmandu, Bhaktapur, and Pharping. My analysis also draws on my MS research (2013), side trips with colleagues to study ongoing road projects in Upper Mustang, the Arniko Friendship Highway, and the Arun Valley, and over twenty years' experience traveling in Nepal as a seasonal adventure travel leader for whitewater and trekking expeditions.

I employed mostly qualitative social science methods for primary data including photo documentation, participant observation, semi-structured interviews

(n=250, household surveys (n=24), focus groups (n=7:63),[29] and mobile methods/ethnography with local participants (foot, public bus, micro van, jeep, and horse). Secondary data were gleaned from textual and discourse analysis (road, mobility, and development reports, media, and grey literature) and historical/archival research concerning mobility histories (Trans-Himalayan Trade, the Nepal Tibet Wars, the Gorkha Conquest, and the Rana rule). Key informants were identified through two research assistants as well as a colleague who all had done previous research in the area.[30] Snowball and random sampling were employed to identify additional informants.

Interview questions were a combination of structured household family background information, semi-structured questions, and open-ended questions designed to elicit relevant qualitative information (**Appendix A**). Questions included the following topics: gender and mobility, women in sports, livelihoods, culture, tourism, education, migration, hydropower development, hydro project-affected people, concerned community groups' demands, road development, trans-border trade, border identity cards, Nepal China relations, China aid perceptions, earthquake experiences, earthquake mobility, and disaster aid and response. Individuals interviewed were composed of a diverse range of people including local villagers, women's groups, in-migrant truck porters, border officials, border identity card

[29] Semi-structured interviews (n=250; Female n= 102, Male n= 123), household surveys (n=24; Female n= 18, Male n= 6), focus groups (n=7:63 there were 7 focus groups with a total of 63 participants, all were female.
[30] Austin Lord (PhD Candidate, Cornell University)

holders[31], Chinese and Nepalese hydro project officials, Nepalese hydro project laborers, concerned community group members, community road board members, restaurant and guest house owners, development project staff, earthquake affected people, earthquake aid and response volunteers, hospital staff, women scooter and motorcycle drivers, and women in sports.

Specific mobile methods (Novoa 2015; Merriman 2014; Büscher, Urry and Witchger 2011) were employed to not only get at the primary questions of mobility but also to involve myself as a participant observer to better understand the mobilities of the local inhabitants and to integrate the theoretical mobilities framework (Adey 2017; Urry 2007; Sheller and Urry 2006) into empirical practice and research. This included walking sections of road, hiking trails where there were no roads, riding horse, and participating in various forms of vehicular mobilities including public bus, microbus, public Tata Sumo (4X4) services, scooter, ambulance, and motorcycle.

Interviews and household surveys (**Appendix A**) were designed to illicit responses about gender and mobility. Questions were asked in Nepali, Tamang, or Tibetan language depending on the language of the interviewee. Questions included but were not limited to: Do you feel free to move about your village whenever you want to? Do you think the women in this village are as free to move around as the men? Is there any cultural/community/family restriction for you to go out and wander around public spaces, on the road, or travel if you want? Where would you like to go that you feel you are restricted from going? Is it OK for women to go out alone? Do

[31] See *Chapter 4* for an explanation and discussion of border identity cards and also Shneiderman 2013.

you go out alone? Who usually accompanies women when they go out and travel? Who usually accompanies you when you go out and travel? Do you think women like to have a male escort when they go out? Would you like to have a male escort when you go out? Should women have the freedom to go out where ever they want? Should men have the freedom to go out where ever they want? Why is there a difference in whether women or men should be able to go wherever they want? Additional questions were grouped under the categories of mobility and economics, mobility and livelihoods, mobility and impacts, virtual mobility, and future mobility (**Appendix A**).

As I became aware of the influence of hydropower development on mobility further questions about hydro project mobilities were added (**Appendix A**) such as: When did the hydro project begin? Are locals getting work with the project? What is your impression of the project? Do you think the project is good for your village? Is the project building a road to your village? How did you manage to get the hydro project to build a road to your village? Who determines the alignment of the road? How do they determine the alignment of the road? What other demands is your village making to the hydro project? What other community development has the project done in your village? What changes have occurred in your village since the arrival of the road? What changes have happened in your village since the arrival of the hydro project? How are the relations between Nepalese and Chinese hydro project workers? What changes do you think will happen to your village over the next 20 years?

After the earthquake I added questions about disaster mobilities, such as: How did you arrive at the Bir Trauma Center from your villages? How much destruction was there in your village? What were the condition of roads and trails near your

village? What will you do now for housing? Do you have any missing family members? Do you have any family or friends in an internally displaced persons (IDP) camp? Where is the IDP camp? What supplies do you need? Do you have cell phone connection? What does your village need for support? What condition is the school?

Data were coded in field notebooks and on survey questionnaires according to themes that would draw on my research framework, objectives, and questions. These themes included gender and mobility, gender economic empowerment, gender education, gender inclusion, gender exclusion, gender equality, gender cultural change, hydropower development, hydro project mobilities, hydro project corporate social responsibility and profit sharing, hydro project-affected people, political affiliations, road construction, village road groups, tourism mobilities, trade and transportation mobilities, trans-border mobilities, mobility imaginations, earthquake-affected people, earthquake aid and response, governmental dysfunction, disaster mobilities, and women in sports. Interviews were then loaded into Excel spreadsheets to further refine analyses and bring out subthemes.

Subthemes included but were not limited to 'scooty girls'[32], female truck porters, female entrepreneurs, female hydro project employees, female microcredit, female education, female cricket players, females in outdoor adventure, female trekking guides, hydro project built roads, hydro project community concerned groups and their demands, hydropower imaginations, hydro project state relations, Trans-Himalayan train imaginings, earthquake internally displaced person mobilities, trauma

[32] Scooty girls is a term used in Nepal to describe women and girls who drive scooters

care, earthquake aid and response mobilities, new constitution mobilities, southern blockade mobilities, and future mobility imaginings.

Gender Sensitivity

In a patriarchal conservative society like Nepal it might seem inappropriate for a man (especially a Western male) to request a woman for an interview, not to mention numerous interviews with women in the same village. In light of this I worked with a Nepalese female and male field assistant team while conducting my household surveys in Timure. A six-page questionnaire (**Appendix A**) was used for the household surveys with the field assistants writing the answers to questions directly on the questionnaire. In the evenings we convened for debriefing sessions to clarify any questions about the data and pick out important themes. This debriefing process helped us eliminate a few questions that seemed redundant and add new questions that we had not thought of before. It also proved useful as an initial coding opportunity. In other parts of my research area I worked with one Nepalese male field assistant. The field assistant translated interviews while I transcribed the information into field notebooks. Again, evening debriefing sessions were used to review the interviews, fill in gaps, correct mistakes and misconceptions, plan questions for the next day, and do initial coding.

Limitations

While the use of a male and female Nepalese field team was ideal in terms of eliciting responses from female Nepalese respondents, I acknowledge that when this team was unavailable the use of only a Nepalese male field assistant may have altered the

responses somewhat from female Nepalese respondents.[33]

[33] I did not notice a distinct difference in female interviewees behavior when using a male field assistant as compared to using a male-female team.

CHAPTER 4

GENDERED MOBILITIES

"Education is women's mobility"! (Head teacher Thulo Syaphrubesi school)

Many gendered mobility studies have focused on how women's mobility is restricted. I propose that given the number of studies with this orientation a more productive focus for this chapter is to look at how women's mobility is facilitated and expanded, at least in my study area. This chapter looks at new mobilities, who has access to them, and who is excluded. This approach takes lived mobility-scapes (Uteng 2011) and visual ethnography (Pink 2001) as lenses to investigate a highly complex border environment that has been transformed from what Kathmandu historically viewed as an isolated backward periphery into a burgeoning new model of frontier development fueled by hydropower development, trade-transport, and tourism. Enmeshed in this new frontier model is a mix of capital flows, state-making sovereignty territorialisations, and diverse scalar spatial and strategic geopolitical reorientations. The cultural, geopolitical, and economic histories of this frontier/homeland intersect with current development trajectories synergizing what I call (borrowing from Murton, Lord, and Beazley 2016) a Trans-Himalayan power corridor (also see *Chapter 3*).

> As Nepal reconsiders its geopolitical relationships in a new post-disaster context (but one still characterized by narratives focused on infrastructure development and energy security), the kinds of investment and actions occurring in Rasuwa are seen by the Nepalese state as the beginnings of a promising new development trajectory and as a model for partnerships that will form the future of Nepal. (Murton, Lord, and Beazley 2016:406)

The following questions are embedded in my approach using a mobilities framework and analysis (*Chapter 3*):

How do women forge new mobility pathways in a Trans-Himalayan power corridor? How do they negotiate mobility in a new development frontier border zone? How has hydro project development impacted their mobility? How has a new international transportation corridor impacted their mobility? In what ways do the hydro project and trade-transport mobilities interact to impact their mobility? How do women traverse a hybrid mobility and development space? How do women leverage mobility in a hyper masculine male space? What new subjectivities are born? How does a hybrid mobility and development space shape new female subjectivities? What gender imaginaries does it produce? How does mobility affect gender and how does gender affect mobility? How does natural disaster affect gendered mobility? How could this be a new model for gendered mobility, as it is a new model for development? Who can access these new mobilities and who cannot? How has tourism affected gendered mobility? What role does education play in forming new gendered mobilities?

Arguments

I argue that converging economic mobilities of trade-transport, hydro project, and tourism have produced a hybrid space where women are able to carve out new mobilities as space invaders (Puwar 2004) in a hyper masculine mobility-scape (Uteng 2011). As agents of migration, education, border, service (female cooks and cleaners in Nepalese hydro project laborers' camps), hydro project concerned community groups, girls on scooters (trade-transport mobilities), virtual, and border card

mobilities[34] they have fashioned ways of being mobile in a male dominated space that brings them economic rewards and empowerment. Some of these mobilities have had cascading effects in the past such as tourism and education and some may have cascading effects in the future as the mobility-scapes evolve. Embedded in these processes are state-making territorializing mobilities that converge with geopolitical trans-border mobilities to synergize a hybrid space burgeoning with mobility potentialities that are uneven and highly contextualized. In the following section I contextualize gendered mobilities in the available literature.

Gendered Mobility Literature Review

First, gender is socially constructed through enacted reiteration within specific cultural temporal/spatial geographies nested in different scales of magnitude. Furthermore, as March (1983:730) asserts, "Gender represents a complex of ideas, beliefs, abstractions, images, imaginings and even fantasies—not people. No component in a gender system stands alone. It is embedded in culture and influences access and use of transport.

> 'Access' is primarily a gendered phenomenon in the developing countries, pertaining to all the subsets of access, i.e. access to information, rights, land, money, education, skills, political participation and voice. (Uteng 2011:1)

Gendered mobility is a field of study that investigates the ways in which mobilities and gender intersect and "how mobilities enables/disables/modifies [sic] gendered practices" (Uteng and Cresswell 2008:1). When we consider gendered mobility, we should pay particular attention to both the physical and social context. There are many

[34] I conceptualize border card mobilities as a subfield of border mobilities later in this chapter.

contexts, which influence gendered mobility including:

- Urban or rural setting
- Cultural context and cultural norms
- Socioeconomic class status
- White women or women of color
- Ethnic identity
- Level of education (Hanson 2010)

The evolution of gendered mobility in relation to mechanized transport must entail consideration of boats, railways, public buses, motorbikes, airplanes, automobiles, and other mechanized vehicles. Each of these forms of transportation has its own unique gendered mobility characteristics. My research focused primarily on the use of public buses, two wheelers (motorcycles and scooters), and automobiles.

In England and the United States, the use of the automobile was initially considered too hard for a woman. However, over time women showed that they could operate automobiles just as well as men and more safely. Nonetheless, within the context of women that could and did operate automobiles initially only privileged white women of higher socioeconomic status made up this group (Ganser 2009). Due to a number of factors, including both women's rights and civil rights movements, the structure of American urban, suburban, and rural residence and lifestyle, and the availability of credit this situation has changed in the United States; presently more women have driver's licenses than do men (AP 2010). At the other end of the spectrum, there are places such as Saudi Arabia, where culturally dictated norms of gendered mobility are designed to keep women in very limited gendered spaces. "There are no specific traffic laws that make it illegal for women to drive in Saudi

Arabia. However, religious edicts are often interpreted as prohibiting female drivers. Such edicts also prevent women from opening bank accounts, obtaining passports or even going to school without the presence of a male guardian" (Jamjoon 2013).[35] Transgressing these male guardian system edicts can result in a jail sentence or in some cases a beating.

Gendered mobility and gendered space are deeply engrained in many mythological forms that are embedded in culture. For example, *Little Red Riding Hood* (Grim and Grim 1900) is a fairy tale that has been read to countless children and has its equivalent in other cultures as well. If we consider what takes place in this story with a gender lens we can see that it is a tale about "normative spatial behavior dictated by prevalent gender roles; this is reflected in a didacticism suggesting that girls need to safeguard themselves when they step out of the home" (Ganser 2009:13). While we can appreciate the adventurousness of Little Red Riding Hood for stepping out of the house alone in the face of convention and going against her mother's wishes by taking an alternate route we also see that she pays for that transgression (Cixous 1981). After arriving at her grandmother's house, she gets in bed with her grandmother (the wolf in disguise) and is eaten. In the Grimm brother's version, a woodcutter (male) intercedes and slays the wolf releasing Little Red Riding Hood and her grandmother from its belly; an interesting twist that reinforces the normative gendered space. As Ganser (2009:13) observes:

> In any case, the tale is an early example of a road narrative that familiarizes the protagonist not only with the effects of the patriarchal spatial and symbolic orders on the gendered individual as well as with the resulting limitations of

[35] In 2008 Saudi Arabia changed its policy allowing women to drive (see Hubbard 2017).

> agency, but also, if the tale is re-read from a feminist perspective like Cixous', with the potential pleasures of transgressive mobility.

While in most fairy tale books Little Red Riding Hood is depicted as a white girl, the struggle for equity in gendered space was even harder for women of color in the United States. They faced not only the normative masculine constructs of gendered mobility but also the race-based restrictions imposed by the white population at large.

> Nineteenth century black women were more aware of sexist oppression than any other female group in American society has ever been. Not only were they the female group most victimized by sexist discrimination and sexist oppression, their powerlessness was such that resistance on their part could rarely take the form of organized collective action. (Hooks 1981:161)

This gendered and racialized mobility applied not just to African Americans, but also to other groups in the US as well, including East Indian (Bald 2012), Chinese (Lee 2000), Japanese (Twomey 2009), Hispanic (Lopez 2008), and Native American (Hirschfleder 1995).

Marilyn Strathern (1988:82) notes in *The Gender of the Gift*, in Melanesian society:

> The modelling of a social life on notions of male rootedness or the mobility that has displaced it, and on their superior organizational skills, could be taken as an ideological set fashioned by men to further their own interests, including the domination of women.

If we consider developing countries, only the rich are able to afford cars and the poor are restricted to the cheaper forms of transport, which usually involve riding overcrowded buses, jeeps, or minibuses. Gendered mobility, however, is more than just about vehicles. Ultimately, gendered mobility affects livelihoods through gendered division of labor. This is not surprising considering that women provide 60 –

80 percent of the food in developing countries and over half of the world's food supply, in addition to most of the household chores such as water, fodder, and fuel wood collection, cooking, child and parental care, and cleaning (FAO 1995). Cunha (2006:8) sums up this reality in Africa:

> In sub-Saharan Africa, women account for 70% of household labour and 85% of household daily effort spent on transport. They carry at least three times more ton/kilometres per year than men. They walk between 15-30 hours per week on transport-related chores, carrying between 30-50 kilograms and frequently with a baby on their backs. These are heavier loads than the maximum 20 kg recommended by the International Labour Organisation, and commonly result in long-term health problems. To help their mothers, young girls are often removed from school to assist with chores (Heyen-Perschon, 2001; Peters, 2001; Omar, 2001; Starkey, 2001; World Bank, 2002a).

Studies of gender and transportation in developing countries have brought to light some interesting socio-cultural aspects of road construction. Fernando and Porter (2002), after compiling many case studies from around the world concerning transportation and gender, concluded that culture has a very strong influence on women's freedom to use transport services. In most cases cultural rules allow men to travel without restriction provided they have the funds. Women, however, do not always have the same opportunity to benefit from improved or new roads when they reach their communities. Access to funds within households and work responsibilities inside and outside the house can preclude women from taking advantage of transport options in the same way that men do. For example, in some areas of Tanzania socio-cultural traditions dictate that only men should own and use transport devices. Hence, women carry loads on their head instead of using bicycles on the road (Mwankusye 2002).

In some cases, as in Saudi Arabia as mentioned above, religious practices

affect whether woman can take advantage of new road construction and consequent mobility benefits. One of the case studies in a Muslim area of Nigeria found that the religious tradition of female seclusion precluded women from taking full advantage of road improvement and better transport because they rarely travel outside the village. Another interesting case from a Muslim area of Bangladesh where, even though the village maintained the tradition of female seclusion, poorer women were not as restricted as richer women due to the cultural stigma of travel being greater for women of higher socioeconomic status (Fernando and Porter 2002).

Some of the positive benefits cited include better access to schools and health facilities and increased participation of men in chores often falling to primarily women, such as collecting firewood and accompanying children to school and the sick to a hospital (Yunusa et al. 2002).

Gendered Mobility in Nepal Literature Review

To begin this literature review of gendered mobility in Nepal it must first be recognized that mobility is very context specific. Studies of high caste Hindu women (Bennett 1983) and low caste Hindu Nepalese women (Cameron 1998) indicate that the Hindu norm of female seclusion has put stronger restrictions on Hindu women's mobility than non-Hindu women in Nepal. Nonetheless, the culturally homogenizing effect of the high caste Hindu led Nepalese government for more than two centuries has placed similar pressures on non-Hindu women especially in areas where there are higher percentages of Hindu caste groups such as Kathmandu. This state-homogenizing project is discussed in more detail in the Gendered Mobility Embedded in Culture section following this literature review.

Acharya and Bennett (1981:xxiii) conducted a study of rural Nepalese women in eight villages covering the country from east to west and north to south, which was intended "… to develop methodologies and implement pilot socioeconomic case studies of women in traditional rural communities". The comparative data was collected to assess the standing of women in their household and social world as well as their economic role. As such it provides valuable insight into gendered mobility in geographically different parts of Nepal as well as within different Hindu caste and ethnic groups. Moving from east to west their research regions/districts and Hindu caste/ethnic groups[36] were: 1) Eastern Terai-Dhanusha District- Maithili (Mixed Castes), 2) Eastern Middle Hills-Sankhuwasabha District- Lohorung Rai, 3) Central Middle Hills-Sindhupalchowk District-Tamang, 4) Kathmandu Valley-Lalitpur District- Newar Jyapu 5) Central Middle Hills-Kavre District-Parbatiya (Brahman, Chetri, and low caste Sarki), 6) Western High Mountains- Mustang- Baragaonle (Tibetan-Speaking People), 7) Far Western Inner Terai-Dang Deokhuri District-Tharu, and 8) Far Western Middle Hills-Rolpa District- Kham Magar. While they found great diversity in mobility among women in these villages one characteristic stood out that was true in all villages—"… even in orthodox Hindu communities unmarried women are allowed much more mobility in their natal home, than they will subsequently enjoy once they have entered their husband's village" (184). This is not surprising considering that in general once a woman marries in Nepal (no matter which caste or ethnic group) it is usually customary to move to the husband's

[36] Hindu caste groups in this survey are Maithili, Newar, and Parbatiya whereas ethnic groups are Lohorung Rai, Tamang, Baragaonle (Tibetan-Speaking People), Tharu, and Kham Magar.

household and be under the supervision of the husband's mother. Another distinction made is that Hindu caste groups prioritize "strict control over female sexual purity" (229) whereas with the non-Hindu caste groups even though marital purity is highly valued it is not the central theme. As a consequence, the mobility of unmarried girls in Hindu caste groups is more restricted and closely monitored as it has negative implications for the family honor if the girl is shamed. Acharya and Bennett found the aggregate data on number of trips shows that the highest number of trips (10+) was carried out by women ages 15-39 in the middle economic strata. While number of trips is but one indicator of mobility it is still useful in terms of indicating that both age and economic status appear to have an influence on female mobility. Another important finding related to mobility regardless of caste or ethnic group is that "Women who have greater economic independence also generally have more freedom in social behavior and life options and vice versa" (154). "More freedom in social behavior and life options" would also indicate that women have more freedom of mobility because in general one needs a certain amount of mobility to engage in social behavior and to pursue life options. This is indicated in the study by the relationship between entrepreneurship and economic independence as quoted by Molnar (1981:84). About the Kham Magar she writes that 'entrepreneurship ... enables young girls to establish their economic independence to some degree before marriage and allows them some choice after marriage (in that it provides) an important means of support for a woman who chooses to divorce or separate from her husband'" (226). Again, this is an indication that women who engage in entrepreneurship that leads to economic independence may also experience more mobility. This is interesting when we look at

the Decision Making Roles in Capital Transactions by Village data. These data indicate that in the Parbatiya, Tharu, Newar, and Maithilli groups men's entrepreneurial projects outnumber women's projects. If we acknowledge entrepreneurship as an indicator of mobility (via economic independence) then these data would tend to indicate that women in the four groups mentioned above have less mobility than women in the other four groups. Again, apart from the Tharu, this seems to indicate that women in Hindu caste groups have less mobility than women in non-Hindu caste groups.[37]

In another study, March (1983) identifies an interesting cultural viewpoint about gendered mobility in the Tamang village she studied. She analyzes how women's weaving and men's writing are "dense symbols of gender" (729). Embedded in these practices are concepts of mobility (weaving) and fixity (writing). She writes, "Women's weaving is uniquely associated with the flux and irregularities of marital exchange; men's writing with the fixity and preordination of localised clan identities" (729). The cloth produced by women weaving "moves within and reaffirms the most reliable reciprocal networks of affection and mutual obligation known to the Tamang. It is truly the social fabric itself" (731). As the cloth moves so do the women that weave it because while the technical and design skills to weave are important, even more important is the woman's ability to circulate the cloth to create the greatest potential social network. Here, women's mobility in this specific realm plays an essential role in shaping the social structure that binds Tamang-ness between

[37] While literature on the Tharu indicate that they practice an animist religion, 90 percent of Tharu in the 2011 Nepal census identified as Hindu.

generational villages, households, and individuals. It is one of the essential cultural adhesives that hold together what it means to be Tamang. This gendered mobility is not just evidenced in weaving but is embedded in other Tamang cultural traditions. March (1987) illuminates how women are integral to hospitality, which constitutes the social life of Tamang and Sherpa culture.

This is in sharp contrast to their Hindu counterparts who are limited in their social interactions, especially concerning hospitality. Rules of ritual purity strictly define how elements of hospitality, such as food and drink, must be prepared and served by Hindu women. Tamang and Sherpa women on the other hand, have relatively no cultural taboos concerning hospitality. In fact, they are an integral part of all aspects of hospitality. March writes (1987:360), "Women and symbols of femaleness are crucial at all levels of exchange-the casual hospitality within villages, the more formal hospitality between affines, and the ritual hospitality of religious practice". Importantly, she continues, "In general, hospitality is offered by the head woman of the house-hold in her capacity as coparcener of the family's estate and exchange obligations." Here women's mobility as social agents is a prime constituent of cultural identity and cultural preservation.

Furthermore, as Tamang women's roles as social agents have undergone change due to the forces of globalization and male out-migration their identity as Tamang women has also undergone changes leaving many Tamang women wondering what it means to be a Tamang woman. About these changes March (2018:20) writes, "Whether they stay behind, come halfway, or go halfway around the world, it is the women who must most dramatically reconfigure their sense of self. Some seem to be

managing to do so; some, not". It would seem then that women's mobility, in this case Tamang women, is a fundamental component of women's identity as social agents and as women in general.

Sylvain and Devries (2012) assert that the Tamang women they studied in Dhidopur, southeast of Kathmandu, were constrained in their movement for labor migration mainly due to social norms. If a woman leaves the village to seek labor her behavior can no longer be monitored by her kin and neighbors, which can lead to gossip and tarnish her family's reputation. In particular, this had to do with both the potential to be lured into sex trafficking and concerns for her personal safety. The authors argue that these views are heightened by the rhetoric about sex trafficking that is prevalent in Nepal and that it discourages the women in their research site from even trying to travel. In the authors' opinion the money spent on these 'scare tactics' could be better used to provide more education for women about sex trafficking and for developing safer transport for women such as women only modes. This supports the statement made by Archarya and Bennett (1981:17): "…Tamang, though they identify themselves as Buddhists and have many cultural and religious ties with Tibet, have been the most influenced by Hindu values. The extent of this influence of course, varies greatly depending upon the degree to which Tamang settlements in a given area are interspersed with Brahman, Chetri, Newar and other more Hinduized Tibeto-Burman tribal groups like the Gurung". I suggest then, that to a certain extent, Tamang women's mobility and by extension other non-Hindu women's mobility is mediated by their proximity to Hindu settlements.

In their study area in Nepal, Seddon and Shrestha (2002) found that road

access in some cases increased the workloads of both women and children because male members of the family would travel to markets and seek off-farm employment leaving them to take up the additional work burden. These authors also commented on how improvements in roads and transportation have facilitated the commercial sex trade. Women can make three times the amount of money in the sex trade as they can from other kinds of labor and for many women it provided a way to ensure adequate income for their family's survival. The town of Siliguri, on the southern border of Nepal, has become the main hub of girl trafficking and prostitution in Nepal because it has the best road links to India where most of the girls are sold into prostitution (Telegraph India 2009). An International Labor Organization report estimated that 12,000 children are trafficked from Nepal every year (Bal Kumar KC et al. 2001).

Ghimire (2002) found a similar increase in the workloads of women associated with road construction. He found that improved road access in a mountainous area of Nepal increased the demand for milk and dairy products resulting in more cattle rearing. The extra burden of rearing more cattle including collecting fodder and mulch has traditionally been women's work. With the increase in cattle their workload also increased. Interestingly, in the *Terai*[38] where the topography is flatter he found that women's burden decreased due to the road because they were able to use bicycles to travel and carry small items. Additionally, the collection of firewood, which used to be a responsibility assumed only by women, was changing because men could now use bikes to transport firewood. Nonetheless, he points out that with the increased mobility

[38] The *Terai* refers to the southern third of Nepal bordering India that merges with the Gangetic Plain.

afforded by roads additional economic activities become available and as a result more travel and transport are required and women are typically the ones who still shoulder firewood collection.

In a 2011 paper, Craig argues that migration, in this case from Mustang, Nepal to New York, fuels the imagination and creates realms of possibility not only for the migrant but also for the friends and family who receive their stories at home in Mustang. In the case study she examines the imagination of health care in New York as opposed to Nepal. "Out-migration from Mustang has created different demands on bodies, alternate ways of understanding causes and conditions of illness, new patterns of seeking medical care" (Craig 2011:210). Ultimately, there was no one answer, all the migrants had different experiences, from those who thought western medicine was better to those who thought traditional medicine was better and some a combination of the two. The significance in terms of mobility is that migration can shape the imagination in different ways.

In the case of the Tamang women in Dhidpour, it had negative connotations that translated into socially constructed prescriptions against women travelling. In the case of Mustang, the conclusion is less clear because the results of migration were interpreted as both positive and negative. What is clear is that imagination is a space within which there is opportunity to imagine mobility as the ideal or the problematic. In the physical realm the individual conceives of particular locations as "…specific places on the map and idealized spaces in which people imagine and enact certain possibilities for living, and experiences of suffering" (Craig 2011:193).

For example, illness experiences and subjectivities can be altered through

> migration such that karma (T. *lé*), as a source of illness causality or divination (T. *mo*), as a way of determining illness causality and an appropriate treatment regime, are no longer viable explanations or practices. (Craig 2011:194)

Craig further argues that migration can shape ideas of personhood and subject as well as the spaces of possibility. These possibility spaces can be interpreted as manifestations of sense of place embedded with life experiences both positive and negative. Physical and metaphorical possibility spaces can affect individual health regimes.

> People from Mustang sometimes connect specific diseases to patterns of migration, both enduring and novel: from the lowland fevers (T. *ring gyi tsawa*) of seasonal moves from high-altitude homelands to lower elevations in Nepal or India, to "tension" or "depression" as idioms of distress that take on particular meanings in New York or Kathmandu. In contrast, people describe a sort of biopsychosocial peace with longing and nostalgia when they speak of Mustang's air (T. *lung,* N. *hawa*) and water (T. *chu,* N. *paani*) and how it agrees with them—the possibilities for living it engenders, and their compromised well being when in other places. (Craig 2011:195)

Imaginary spaces interact in physical spaces, either far removed from the imagined space or, due to migration, in the imagined space. When these combinations of spaces intersect, there can be a physical manifestation of the psychological space. In either case, the mobility within these spaces provides the agency, or lack thereof, for the evolution of the process. In this regard we can see how mobility in the physical world is intimately connected and shaped by mobility in the imaginary world and that both are gendered spaces with gendered mobility.

Finally, several other studies have been conducted on gender and transport in Kathmandu (Action Aid 2013; Harrison 2012; Udas 2012; Paudel 2011; ADB 2010). These studies highlight the daily harassment women in Kathmandu face as they try to

negotiate moving in the city. The overcrowded public transit systems lead to groping and other form of sexual harassment, which has become endemic in Kathmandu. The lack of proper street lighting makes it dangerous for women to approach bus stops at night and the poor quality of the sidewalks, or in many cases lack of sidewalks, can often cause physical injury.

While there have been several groups who have tried to make gender and transport issues more public in Kathmandu such as "Safe City Nepal"[39], "Social Service Awareness Raising and Advocacy for Tranquility and Humanity"[40] (SAATH), the international organization "Meet Us on the Streets"[41], and events such as "Stop Violence Against Women"[42], progress has been slow. Nonetheless, change is happening. Sajha Yatayat, a newly opened bus company (May 2013) hires women conductors to sell tickets on the buses. Their buses have restrictions for only fifteen standing passengers and they have installed closed circuit TV cameras as well. Namita, one of the female conductors, thinks Sajha buses are safer.

> Sajha bus is a legacy and I think people appreciate the service. It is also safer for us women to work because not more than 15 people can stand and there´s a lot of space. I think people respect Sajha and wouldn´t ever think of vandalizing the seats or spitting, like it happens in other vehicles. Being a woman, I cannot imagine working as a conductor in other public transports, except Sajha. With the way so many people crammed in, there´s hardly any space for the conductor to stand. (Tripathi May 15, 2013)

Literature Review Conclusion

Gendered mobility is a fundamental aspect of daily life in both developed and

[39] https://www.facebook.com/safecitiesnepal
[40] http://www.saathnepal.org/
[41] http://www.meetusonthestreet.org/
[42] https://www.facebook.com/safecitiesnepal/events

developing countries. Most of the inquiry into gendered mobility has focused on travel patterns of women in developed countries (Fahs 2011; Ganser 2009; Wilke 2007; Morgan 2001; Rosenbloom 1993; Hamilton, Jenkins and Gregory 1991; Jones 1990; Grieco, Pickup and Whipp 1989; Little, Peake and Richardson 1989). These studies were important to establish that men and women have very different travel patterns, namely that men usually make fewer trips of longer distance but more direct with very few stops, whereas women make many shorter distance trips but these trips involve many stops and many different routes and therefore often take more time then men's trips. The different nature of the trips requires different types of access to different modes of transport, especially for the more complicated travel patterns of women.

Regardless, the studies of women's travel patterns in developed countries, while useful in looking at developing countries, do not have the depth of complexity needed to understand gendered mobility in radically different cultural and geographical spaces such as rural mountain villages in the Nepal Himalaya. While there have been advances in Nepal in terms of inclusion of gender mainstreaming in most development projects the reality is that not much has changed not only in Nepal but worldwide. "Despite extensive discourse and resources that focus on women as key actors for development, their situation has not changed considerably" (Cunha 2006). In terms of the Gender Equity Index Nepal falls towards the bottom with a score of 47 with Afghanistan at the very bottom with a score of 15 and Norway at the top with a score of 89 (Social Watch 2012).

There is a pressing need for better understanding of gendered mobility in developing countries. To do this requires site-specific information that will help in

designing transport schemes that are gender equitable. Barwell (1996:26-27) has identified five elements that are crucial in understanding the scope of transport load that is placed on women in rural locations:

1. Number of female adults in the household;
2. Distance to sources of water and firewood;
3. Number of children in the household that can help, especially daughters;
4. Food preferences of the household – this is related to the distance needed to travel to process different staples such as rice or flour; and
5. Availability and use of individual means of transport (IMT)

This information could serve as a baseline for a more targeted study to determine what transport modes would work best in each individual setting. Additional indicators that reflect the availability and access to transport such as maternal mortality rates as an indicator of how easy it is to get to medical centers could be incorporated into a feasibility study and would help planners tailor transport modes for specific contexts. In the above example, this type of approach will also help in planning health facility location and in adapting IMT that provide the broadest range of access. As Uteng (2009:69) notes: "Given such benchmarking, it will become easy to assess the specific kinds of alterations needed in the mobility systems to adapt towards gendered needs."

These are just a few examples of how to begin the process of assessing and adapting mobilities toward gender equity. One of the key elements is changing the traditional transportation planners' myopic concentration on connecting point A to B to one of looking at the "lived in" environment where mobility is needed

(Gudmundsson et al. 2005). It is in this 'lived in' space that the subtleties of gendered mobility can be recognized and addressed. Mobility is about moving in spaces to accomplish daily activities. To understand mobility needs we must therefore understand the daily activities in the space where people live and how that space is socially structured and gender prescribed.

Gendered Mobility Embedded in Culture

To understand gendered mobility in Nepal first we need to look at its historical cultural underpinnings. Nepal was ruled as a Hindu kingdom from 1769 to 2008 by a hereditary line of Shah kings and Rana prime ministers. For almost 240 years the monarchy promoted a hegemonic Hindu religious and cultural rule that sought to bring Nepal's subjects under its dominance. Centuries of forced accommodation to the monarchies' belief in rules of the caste system led to a highly marginalized constituency. This influence was felt both within the caste system as well as in the highly diverse cultural landscape whose traditions were not Hindu. Within a century of the consolidation of Nepal all cultural groups were subsumed within the caste system when the rulers fashioned Nepal's first, strictly defined, civil legal code (Whelpton 2005). This further marginalized groups, which were now defined by Hindu high caste rules of ritual purity-impurity, cultivating a dominant caste and gender-based hierarchy. In essence they created what Cubelic and Khatiwoda (2017:80) describe as "…a polyvalent ideology which amalgamated kingship, legality, and religious patriotism".

Gendered high caste Hindu strictures infiltrated Nepal's plural cultural landscape fashioning a dominant ideology that defined men as godlike to their wives,

and defined women as supplicant, reverent, and demure subjects of their godlike husband, bound to the home to serve him and his children as their sole purpose in life. As March (forthcoming:4) puts it, "In sum, it seems reasonable to label the material arrangements between the sexes in the Khas-Parbatiya [high caste] system one of the protective dependency of women".

This patriarchal hegemonic gendered worldview became idealized as the exemplification of the 'ideal' Nepalese woman and was incorporated in multiple forms of state produced 'propaganda' including educational material, children's stories, government laws and edicts, state promoted national Hindu religious festivals and holidays, popular song and dance, and diverse forms of state influenced media. This severely restricted women's mobility to a tightly circumscribed space within the home domestic sphere. Women were treated as children that should be seen (only in the home environment) and not heard. Public space was for men's business and socializing—not for the ideal woman. Education was also a male space embedded with the logic that women were to be housewives so an education would be wasted on them and necessitate they enter male demarcated social space (Thompson-Grossman 2015).

Women's mobility and rights in accordance with these strictures became indoctrinated as part of state laws, doctrines, and policy (Tamang 2000). Issues of family honor embedded in female behavior further entrenched these gendered norms creating a surveillance network of family, friends, and community who enforced gendered mobility restrictions through rumor, gossip, and discursive honor-based rhetoric. Women who transgressed this code of honor were shamed; smeared with

undertones of sexual impropriety (Thompson-Grossman 2015). As Bennett (1983:2) explains, "Rather than be called a busybody (or worse) it is better to stay in one's own courtyard".

Despite state efforts to create an image of the homogeneous Nepalese family and a correlated ideal woman, the sheer diversity of Nepalese society with over 100 caste/ethnic groups (CBS 2011) limited the state's homogenization efforts. Greater autonomy and mobility for women in some ethnic groups has been noted by Ortner (1999) with the Sherpa and by March (2002) with the Tamang. March writes (2002:211) "… Tamang women's and men's experiences of marriage and family formation are very nearly symmetrical, or at least, not systematically unequal". Nonetheless, the reach of the state and its propagandist endeavor is all pervasive in the education system, in both formal and informal national, regional and local institutional administrative hierarchies, and national Hindu festivals and holidays spreading Hindu gendered norms even into non-Hindu groups (Lawoti 2008). It is within this brief historical overview of gendered mobility in Nepal that I situate this chapter. In the following sections I use local voices to investigate and illuminate gendered mobilities.

Thulo Syaphrubesi (see **Figure 3.1**)

Dawa[43] is 30 years old; she has a BA in education and is currently the head teacher at the boarding school in Thulo Syaphrubesi. She was born in Thulo Syaphrubesi, one of the towns on the Langtang National Park trekking route. When she was 12 years old a German trekker offered to sponsor her to attend the Ideal

[43] Pseudonyms are used for interviewees throughout this dissertation.

English boarding school in Kathmandu. After graduating high school, the sponsorship continued allowing her to attend college and earn her BA. Her father was a poor farmer who supplemented agriculture with work as a porter on trekking trips. And she adds with a huge proud smile "He was the first father to send his girl to school in our village"! He slowly worked his way into a position as a guide for trekkers and with this experience was eventually able to start his own trekking business, eventually growing it large enough to have an office in Kathmandu. Dawa explains that many of the children in the Langtang area have been sponsored to go to school by trekkers, as she was. She elaborates that 70 percent of the children along the Langtang trekking trails have been sponsored to attend boarding schools and that most of the government schools have been closed because no children attend them anymore.

This is not too surprising because government schools in mountainous rural areas have a reputation for high teacher absenteeism and turnover. It is not uncommon to hear stories of teachers who have been assigned to rural mountain villages and have never shown up to teach. The teachers, who mostly come from Nepal's center or southern lowlands, consider rural mountain villages 'hard labor'. Those who do show up to teach often do not last long in what they consider harsh, backward, and uncivilized conditions. But Dawa is not one of those. She grew up in the mountains and she came back to her home village because she has learned the value of education for women and now, she is committed to helping girls become better educated. "My first priority is education for women and girls" she explains enthusiastically. "If a woman is educated, she knows the importance of the Internet and how much information can be learned from it and how to connect to other women." After I

explain to her about my research she exclaims emphatically "Education is women's mobility"! She becomes very animated and continues on this theme of education as women's mobility for some time. "If women are illiterate, they can't sign, they have to use their fingerprint."

While signing one's name may seem insignificant, Locher and Müller-Böker (2007:1125) found that it had a significant impact on women's self-confidence as well as other educational assets for women in the Kanchenjunga Conservation Area Project, in eastern Nepal.

> With their newly acquired skills, women are able to keep their account books for the microfinance scheme, and read letters from relatives who have migrated. However, we found that for many women the ability to sign their name is the most important change. This is obviously crucial to their self-confidence and is expressed in their vivid pride in using their signature in the women's group meetings instead of fingerprints. Women also mention less shyness towards educated male villagers and foreigners (Locher 2004, 2006).

Ahearn (2001a) comments extensively on the significance of literacy as a vector for empowerment and agency in the writing of love letters by women in Nepal. But, at the same time she cautions against a reductive take on the efficacy of literacy, stating:

> In addition to offering us valuable insights into the rapidly changing marriage practices in this one community, these love letter correspondences also provide us with deeper understanding of the social effects of literacy. While the acquisition of literacy skills may open up new opportunities for some individuals, such skills can also impose new constraints, and disappointments, As will become apparent in the chapters that follow, the increase in female literacy rates in Junigau in the 1990s made possible the emergence of new courtship practices and facilitated self-initiated marriages, but it also reinforced certain gender ideologies and undercut some avenues to social power, especially for women. Thus, this study reminds us that literacy is not a neutral, unidimensional technology but rather a set of lived experiences that will differ from community to community (2001:7).

Dawa also explains how the women's group she belongs to has developed a system to deal with men who beat their wives. It is part of the constitution they drafted for their women's group. If a husband engages in such activity he must come before the women's group for a reprimand. If he does it a second time, he must pay a fine. The point she makes about literacy is important she stresses because it means women can read documents such as their constitution and land titles. The women's group has moved on other projects, such as working with World Wildlife Fund to set up awareness about garbage and recycling. They have set up two dumping spots outside the village, one for bottles and one for paper. Again, Dawa attributes this to women's education.

In another example, a hydro project has been proposed for the Langtang River and public meetings will take place. If a woman is literate, she can read the information printed about the project and go to the public meeting informed, which empowers her to speak up about her opinion (**Figure 4.1**). Everyone in the area is aware of the changes that have taken place in the Trishuli Valley due to hydropower development, the public selling of Chilime HEP stocks, and new roads (Murton, Lord and Beazley 2016). The Chilime HEP stock has done very well so people in Thulo Syaphrubesi are extremely excited about a hydro project coming to their area. Many want to attend the public meeting, but they also understand the importance of being well informed. They know for example that 'project-affected' women in Timure have attended meetings and spoken up about what community development projects they need from the hydropower company. As Dawa asserted, "Adult education is very important for women. Everyone should get a chance to speak"! Education is mobility

for women, and no one knows this better than Dawa. But it has not been easy for women in Nepal to get education as noted above.

Figure 4.1 Local villagers reading the sign about the Trishuli 3A project public meeting (Photo courtesy of Austin Lord 2014)

Traditionally, in Nepalese Hindu society, it was assumed that girls would grow up to be housewives so an education would be wasted on them. It was men who went out into the working world that needed an education,[44] not women. In rural areas women and girls provided the backbone for agriculture and animal husbandry by fetching water, firewood, and fodder as well as child rearing and other household chores. Girls could not be spared to attend school much above the third to fifth grade level if at all because they were essential laborers to support women's work at home.

Many of Dawa's assertions are backed up by research. The UN Millennium Project Task Force on Education and Gender Equality Report (2005:37) states "The evidence suggests that among all levels of education, secondary and higher levels of education have the greatest payoff for women's empowerment". In more detail the

[44] This was in part due to the Nepalese government requirement for migrant visas.

report says:

> Data from around the world show that increased education is associated with the empowerment of women (Malhotra, Pande, and Grown 2003). Educated women are more effective at improving their own well-being and that of their family. They are better equipped to extract the most benefit from existing services and opportunities and to generate alternative opportunities, roles, and support structures. These empowering effects of women's education are manifested in a variety of ways, including increased income-earning potential, ability to bargain for resources within the household, decision making autonomy, control over their own fertility, and participation in public life. (UN:37)

Surprisingly, when I asked villagers in the Langtang area about children's education most of them told me all the children had been sponsored to go to boarding schools, boys and girls. Many are in Kathmandu but there are also local boarding schools, which are cheaper, and the children stay closer to home. So how did this sponsorship for education system evolve? In the following section I trace out its evolution using my mobilities framework described in *Chapter 2*.

A Brief History of Converging Road, Hydro project, Tourism, and Education Mobilities

The hydro project-road coupled system led to the first road entering the Trishuli Valley in the late 1950s to start the Trishuli HEP (Basynet 1989) and then moved up the valley. Mobility spurred by tourism appears in the late 1970s with the opening of Langtang National Park (LNP) in 1976 (see **Figure 3.1**). It became the third most popular trekking destination in Nepal, a position it still holds today. The road mobility continued up the valley in the form of state economic and territorialization mobilities to reach the rich lead/zinc deposits in the Ganesh Himal and the establishment of the Samdong mine at the end of the road (Campbell 1993).

This road mobility helped increase the tourism mobility to Dhunche and eventually Syaphrubesi. The present-day location of Syaphrubesi is a material manifestation of road mobility. Before the road there was no village at the present-day site of Syaphrubesi when I visited the area in 1985. The original Syaphrubesi (now called Old Syaphrubesi) was located on the opposite (east) side of the river strategically located along the old Trans-Himalayan trade route.

The economic mobility potentiality centered on the Samdong mine necessitated that the road crossed the river and head west to the lead/zinc deposit. After the road crossed the river strip development began along the road in what used to be agricultural fields. Trekking guesthouses and other service tourism mobility facilities developed eventually eclipsing the size and importance of Old Syaphrubesi. A new town was born (Syaphrubesi) due to the converging economic mobilities of resource extraction and tourism (economic). As more trekkers began arriving in LNP, villagers along the trail began asking trekkers to sponsor their children to attend school. This trend continued to grow with the road and tourism mobilities converging and creating a hybrid space where sponsorship of children to attend school reached a tipping point and cascading effects came into play. According to local villagers almost all of the government public schools in LNP are now closed because as one villager put it, “all the children are now sponsored by trekkers so there are none to attend public school”. This cascading effect did not move further north because this area was near the Tibet border and closed to tourism until 2002. This speaks to the impact of mobilities on villages along tourism mobility pathways.

After 2002, tourism intended specially to benefit the poor opened the area

north of Syaphrubesi with the initiation of the Tamang Heritage Trail (THT) (TRPAP 2007). Now a similar convergence of road and tourism mobilities has again led to a cascading effect where many of the children along the THT are receiving sponsorship by trekkers to attend boarding school. During my travels along the THT, villagers in every village in which I stayed requested that I provide sponsorship for their children's education. While this process has still not reached the same saturation level as LNP it is well on its way. The tourism mobility has also led to people being less dependent on subsistence agriculture thereby having an effect in the socio-cultural realm in terms of traditional and alternative livelihoods changes. This change has been fueled in large part by income from remittances sent to Nepal from family members working in the Gulf countries. Interestingly, the tourism road mobility convergence that created the hybrid space for school sponsorship has also had a cascading effect on changing livelihoods, moving away from dependence on agriculture to a mixture of agriculture and tourism.

Of course, this cascading effect is uneven and only some villagers with business sense and access to capital can make the transition to tourism; women manage much of this tourism mobility. The conversion to tourism has meant fewer children are needed to help with agricultural chores so more boys and girls are now attending school. And as noted previously education can be one of the most important interventions in terms of gendered mobility and women's empowerment.

In this sense we can follow the progression of converging mobilities projects and hybrid spaces leading to cascading effects from coupled hydro project-road mobilities in the late 1950s to converging road tourism mobilities in the 1970s with

the establishment of LNP and increasing trekkers, to the road economic mobility convergence to Samdong mine and the establishment of Syaphrubesi. Then the mobility progression moved on to the economic tourism mobility of the THT and the subsequent cascading effect of school sponsorship along the THT with the ensuing gendered mobility space opened by the education mobility. Again, these mobility spaces are unevenly distributed focusing mainly on the villages that are along the tourism mobility pathway and even within that space there are constraints embedded in economic mobility. Nonetheless, as the concern of this dissertation is to focus on new mobility pathways it acknowledges also that benefits are always unevenly distributed and there will be those that have access to them and those that do not, which will be addressed below.

Here, the importance is to recognize the convergence of road, tourism, and education mobilities in opening of spaces for gendered mobility. I argue that without the convergence of these mobilities and the resultant hybrid spaces and cascading effects the opening of gendered mobilities spaces would be much fewer.

The Current Matrix

The Caveat

My research team's interviews with Tamang women in Timure (see **Figure 3.**1) asked many questions from different angles about women's mobility (**Appendix A**). Yet every time the answer was a unanimous "no we do not have any restrictions on our mobility". In other words, "we are free to go where ever we want"[45].

[45] All of the Tamang women I interviewed in Timure (n=18) stated they had no restrictions on their mobility.

Interestingly, there was always the caveat that ended the sentence with “if we have a purpose”—a curious phrase that took some time to decipher.

It seemed to me that there were plenty of purposes that one would have for wanting to be mobile. For example, to visit a friend, walk along the river, see what was happening on the other end of town, or just to wander with no particular purpose in mind. But this is not what they meant by “if we have a purpose”. The purpose in this case was very specific —it meant a household purpose. In other words, what they were really saying was “we are free to go where we want as long as we are fulfilling a household task”.

How this really translates is the fact that women are so busy taking care of the household and household chores that they do not have time to be mobile for any other reason. It is not seclusion as it is with traditional high caste Hindu female gender norms but rather simply a high volume of work. In the case of wage labor women have to be mobile to travel to the wage labor site but the purpose is still presumably to support the household. This is supported in the literature by an extensive study in rural communities across Nepal involving both Hindu and non-Hindu women. Acharya and Bennett (1982:x) state, “With an average female work burden of 10.81 hours per day (compared to 7.51 for men) rural women have no "spare" time” (emphasis in the original).

Nonetheless, wage labor has traditionally been men’s work and women are creating new gendered mobility spaces in a previously masculine circumscribed space even if it is still in support of the household. In view of this it is recognized that some of the new mobilities pathways mentioned below are tempered with this awareness.

This is not to disparage the creation of new mobility pathways but to acknowledge that mobility does not always equate with freedom. In a prison there are people in solitary confinement who have very little mobility compared to the general population, but just because the general population has more mobility does not mean they are free—they are just more mobile in prison. As Cameron (1998) has acknowledged *dalit* women (lowest caste) often have more mobility than high caste Hindu women because the high caste norms of seclusion do not apply to them in the same way. Interestingly, just because *dalit* women have relatively more mobility does not mean they have no restrictions and are free to go and do whatever they want. Here we see a characteristic of mobilities that several mobility scholars have pointed out. Importantly, mobilities are both relational and relative (Adey 2010; Urry 2007; Cresswell 2006).

This naturally leads to a discussion of the concepts of intersectionality and agency within gender studies and specifically for the purposes of this dissertation, gendered mobility studies.

Intersectionality

Coined in 1989 by Kimberlé Williams Crenshaw[46], (a professor of law at University of California, Los Angeles Law School), the term intersectionality is described in general by Hankivsky (2014:2) below.

> Intersectionality promotes an understanding of human beings as shaped by the interaction of different social locations (e.g., 'race'/ethnicity, indigeneity, gender, class, sexuality, geography, age, disability/ability, migration status, religion). These interactions occur within a context of connected systems and structures of power (e.g., laws, policies, state governments and other political and economic unions, religious institutions, media). Through such processes,

[46] Crenshaw developed the intersectionality concept as a black feminist critique of the law, arguing for examination of the intersection of sex and race within the context of law.

> interdependent forms of privilege and oppression shaped by colonialism, imperialism, racism, homophobia, ableism and patriarchy are created.

In essence, discursive overly simplified tropes of gender relations and gendered mobility tend to obscure the multitude of nuanced contextual influences and experiences present in any given situation. An intersectionality approach removes the veil that obscures these nuances making them visible (Colfer, Basnett, and Ihalainen 2018). Simply put, "According to an intersectionality perspective, inequities are never the result of single, distinct factors. Rather, they are the outcome of intersections of different social locations, power relations and experiences" (Hankivsky 2014:2). For example, in the case of Hindu women mentioned above, a stereotypical trope is that Hindu women have limited mobility; confined mostly to the house and that Tamang women have greater freedom of mobility. However, when we dissect the category Hindu women, we find that there are subcategories of Hindu women ranging from high caste Hindu women at one end of the spectrum to low caste *Dalit* women at the other end and each of their experiences of mobility is different, influenced by a myriad of factors. In addition, the mobility of Hindu women living in urban areas as well as in small villages far away from urban centers may be affected differently.

The Hindu tradition of female banishment from the household to live in seclusion during menstruation (*chhaupadi*) in menstrual huts due to Hindu norms of impurity is still practiced in areas of rural western of Nepal. During *chhaupadi* women's mobility is strictly curtailed and often conditions in menstrual huts are dangerous to women's health. The Nepal Supreme Court outlawed the practice of *chhaupadi* in 2005, but it still continues in some areas. In 2017, a law was passed to

prosecute anyone who forces a woman into isolation during menstruation, yet every year there are newspapers reports of women dying in menstrual huts[47] (Iaccino 2018; Oppenheim 2018; Sharman and Gettleman 2018).

When we look at Tamang women, we see a difference in mobility between younger generation women and whether they are single or married—young unmarried Tamang women having noticeably more freedom of mobility. Yet in individual cases, the agency to enact that mobility can be restrained by different "social locations" (Hankivsky 2014:2) as I describe in the village of Briddhim (see **Figure 3.1**). following.

Tsering and Chimmi are both 20 years old and are friends having grown up in Briddhim most of their lives. Tsering's parents are poor farmers who struggle to make ends meet. Luckily, Tsering met a trekker in Briddhim who sponsored her to go to school in Dhunche. She passed her School Leaving Certificate[48] (SLC) exam and now is seeking sponsorship to continue her higher education. She feels a familial obligation to remain in Briddhim for the time being because her parents are old and ailing. Chimmi's parents own one of the nicer guesthouses in Briddhim where Chimmi works during holiday breaks from her schooling in Kathmandu. Chimmi's brother has a job in Kathmandu and with some help from their parents he bought Chimmi a scooter as a SLC graduation present. Chimmi's parents are younger than Tsering's and in good health, so Tsering does not need to remain in Briddhim to take care of them. In this

[47] Reports of women dying in menstrual huts attribute the deaths to heart attacks, snake bites, wild animal attacks, smoke inhalation from starting a fire to warm the hut, and lack of basic health care.
[48] In Nepal the SLC is more or less equivalent to high school graduation in the US.

case, Chimmi has relatively more mobility than Tsering due to differing economic and familial health (age related) "social locations" (Hankivsky 2014:2). If we compare this example of young Tamang women's mobility with a high caste Hindu woman's mobility of the same age, Laxmi, the importance of intersectionality to gendered mobility comes even more sharply into focus.

Laxmi grew up in a poor Brahmin family in southern Nepal. Her father died when she was young leaving her mother to raise her and her brother. As a child Laxmi loved watching the boys in her village play cricket. With her father's encouragement and her strong determination she transcended the Hindu and Nepalese gendered norm of cricket (and sports in general) as a male only sport.[49] To make a long story short, Laxmi is now one of only two female level II cricket coaches in Nepal, has organized a women's cricket team that competes in international tournaments, and has started a cricket training center for young girls. Her strong will, determination, and dedication to raising awareness of women in sports (and specifically women in cricket) has led her along a path of generating donations and grants to fund these activities as well as purchasing a scooter. The scooter has freed her from having to ride public buses to and from Pharping (an hour-long journey from Kathmandu) where much of her activity is centered. She also now uses her scooter to visit her mother in the Terai, cutting the four to five-hour bus trip in half.

The point here is that simply stating that Hindu women have more restricted

[49] In Nepal, sports in general have been considered exclusively male domains not only due to gendered norms of sexual proprietary but also due to the somewhat universal male attitude that women cannot perform sports activities at a level that qualifies them as athletes—at least in comparison to men.

mobility than Tamang women hides the nuances of the differing levels of mobility within the category Hindu and Tamang women. These nuances, as mentioned in the quote by Hankivsky (what she calls social locations), include for example, "'race'/ethnicity, indigeneity, gender, class, sexuality, geography, age, disability/ability, migration status, [and] religion" (Hankivsky 2014:2). Indeed, most of these categories are evident in the cursory discussion of *chhaupadi* above as well as in the lives of Laxmi, Chimmi, and Tsering. Nonetheless, issues of power still need to be addressed, as these are fundamental to issues of gendered mobility and to an intersectionality lens. Harkening back to Hankivsky's (2014:2) discussion of intersectionality she writes,

> These interactions occur within a context of connected systems and structures of power (e.g., laws, policies, state governments and other political and economic unions, religious institutions, media). Through such processes, interdependent forms of privilege and oppression shaped by colonialism, imperialism, racism, homophobia, ableism and patriarchy are created.

Power also has an inherent link to agency—both terms are discussed below.

Power and Agency

It is beyond the scope of this dissertation to engage in a lengthy discussion of power and agency[55] as both subjects have been critiqued voluminously in academic literature. I chose rather to specify which concepts of each term I follow here.

Power

One of the weaknesses of the intersectionality approach is that it does not offer

[55] For example, a lengthy critique of the "power shift" by looking at the works of Foucault, Bourdieu, Williams, Scott, and others (see Ortner 2006).

a new theory of power. “Finally, many have argued that intersectionality does not really offer a new theory of power. While scale and the (false) dualism of structure versus identity represent one of the main tensions in studies about intersectionality, its limited theorization of power seems to be its main weakness” (Bastia 2014:245). Given this deficiency an existing theory of power must be employed.

Foucault (2001) wrote extensively about power. In his (1976) *History of Sexuality*, Volume I: An Introduction, he does in many ways describe what he means by power in relation to the history of discourse on sexuality. “The history of sexuality-that is, the history of what functioned in the nineteenth century as a specific field of truth-must first be written from the viewpoint of a history of discourses” (Foucault [1976] 1978:69).

He argues that power has set down rules for sex that require obedience through “domination, subjugation, and submission”. Writing about a type of power he states:

> This is the paradox of its effectiveness: it is incapable of doing anything, except to render what it dominates incapable of doing anything either, except for what this power allows it to do. And finally, it is a power whose model is essentially juridical, centered on nothing more than the statement of the law and the operation of taboos. All the modes of domination, submission, and subjugation are ultimately reduced to an effect of obedience (Foucault [1976] 1978:85).

Foucault further explains his concept of power as a “multiplicity of forces relations”.

> It seems to me that power must be understood in the first instance as the multiplicity of force relations immanent in the sphere in which they operate and which constitute their own organization; as the process which, through ceaseless struggles and confrontations, transforms, strengthens, or reverses them; as the support which these force relations find in one another, thus forming a chain or a system, or on the contrary, the disjunctions and contradictions which isolate them from one another; and lastly, as the strategies in which they take effect, whose general design or institutional crystallization is embodied in the state apparatus, in the formulation of the law,

in the various social hegemonies (Foucault [1976] 1978:93).

Larkin (2011:14) writing about Foucault and power suggests, "Power for him [Foucault] is simply the ability to create change in society or in the behaviour of individuals, be it positive or negative. Power is then everywhere, in every relationship; we are constantly subjecting it and being objects of it." For purposes of this dissertation then, I am in agreement with Larkin's take on Foucault. That is with the caution expressed by Dore (2018:737). Writing about Foucault and power he states, "there is no systematic or unified account of Foucault's sociology of power or of its relationship to law. Among the reasons may well be that Foucault is not always easy to read. Even when he gives tantalizingly cryptic definitions, they are more often than not declaratory of what Foucault does *not* mean by power (emphasis in the original)".

It should also be noted that there is further significance of the *History of Sexuality* for this chapter on gendered mobility in that Foucault puts forth the idea that sexuality is socially constructed. For example, writing about homosexuality he says, "Homosexuality appeared as one of the forms of sexuality when it was transposed from the practice of sodomy onto a kind of interior androgyny, a hermaphrodism of the soul. The sodomite had been a temporary aberration; the homosexual was now a species" (Foucault [1976] 1978:43). While he does not use the term gender in the *History of Sexuality* it would not be unreasonable to assume that he meant gender was also socially constructed, indeed if gender identity is an orientation toward and aspect of sexuality. A further reading of his thoughts on homosexuality brings this aspect to light.

> The nineteenth-century homosexual became a personage, a past, a case history, and a childhood, in addition to being a type of life, a life form, and a morphology, with an indiscreet anatomy and possibly a mysterious physiology. Nothing that went into his total composition was unaffected by his sexuality. It was everywhere present in him: at the root of all his actions because it was their insidious and indefinitely active principle; written immodestly on his face and body because it was a secret that always gave itself away. It was consubstantial with him, less as a habitual sin than as a singular nature. We must not forget that the psychological, psychiatric, medical category of homosexuality was constituted from the moment it was characterized-Westpha's famous article of 1870 on "contrary sexual sensations" can stand as its date of birth'-less by a type of sexual relations than by a certain quality of sexual sensibility, a certain way of inverting the masculine and the feminine in oneself (Foucault [1976] 1978:43).

Again, when he writes about the "family cell" the logic of a socially constructed sexuality (including the female body) vis á vis the socially constructed normative family becomes evident.

> The family cell, in the form in which it came to be valued in the course of the eighteenth century, made it possible for the main elements of the deployment of sexuality (the feminine body, infantile precocity, the regulation of births, and to a lesser extent no doubt, the specification of the perverted) to develop along its two primary dimensions: the husband-wife axis and the parents-children axis. The family, in its contemporary form, must not be understood as a social, economic, and political structure of alliance that excludes or at least restrains sexuality, that diminishes it as much as possible, preserving only its useful functions. On the contrary, its role is to anchor sexuality and provide it with a permanent support. It ensures the production of a sexuality that is not homogeneous with the privileges of alliance, while making it possible for the systems of alliance to be imbued with a new tactic of power which they would otherwise be impervious to. The family is the interchange of sexuality and alliance: it conveys the law and the juridical dimension in the deployment of sexuality; and it conveys the economy of pleasure and the intensity of sensations in the regime of alliance (Foucault [1976] 1978:108).

While Foucault has much more to say that is pertinent to this dissertation, it is beyond the scope of this dissertation to delve further into his writing except to point out his insightful thoughts on ownership of the body.

> The growth of perversions is not a moralizing theme that obsessed the scrupulous minds of the Victorians. It is the real product of the encroachment of a type of power on bodies and their pleasures. It is possible that the West has not been capable of inventing any new pleasures, and it has doubtless not discovered any original vices. But it has defined new rules for the game of powers and pleasures. The frozen countenance of the perversions is a fixture of this game (Foucault [1976] 1978:48)**.**

Agency

Agency is an equally contentious term as the Comaroff's (1997:37) alluded to when writing about agency referring to it as "that abstraction greatly underspecified, often misused, much fetishized these days by social scientists". Hence, I choose to follow Ortner's conception of two types of agency, among various types, namely "agency of power" and "agency of intention" (Ortner 2001:78-79). Ortner describes "agency of power" below.

> In probably the most common usage,' agency' is virtually synonymous with the forms of power people have at their disposal, their ability to act on their own behalf, influence other people and events, and maintain some kind of control in their own lives. Agency in this sense is relevant for both domination and resistance. People in positions of power 'have' – and are authorized to have – what might be thought of as 'a lot of agency,' but the dominated too always have certain capacities, and sometimes very significant capacities, to exercise some sort of influence over the ways in which events unfold. Resistance then is a form of 'power agency,' and by now we have a well-developed theoretical repertoire for examining it. It includes everything from outright rebellions at one end, to various forms of what James Scott (1985) so aptly called 'foot dragging' in the middle, to– at the other end – a kind of complex and ambivalent acceptance of dominant categories and practices that are always changed at the very moment they are adopted (78).

She goes on to describe "agency of intention" as concerned with "intentions – of projects, purposes, desires" (79). Furthermore, Ortner (2006:57) stresses the importance of the cultural underpinnings of agency writing:

> Agency is not an entity that exists apart from cultural construction (nor is it a

> quality one has only when one is whole or when one is an individual). Every culture, every subculture, every historical moment, constructs its own forms of agency, its own modes of enacting the process of reflecting on the self and the world and of acting simultaneously within and upon what one finds there.

Subjectivity, meaning "a specifically cultural and historical consciousness" is an important aspect of agency for Ortner (2006:110).

> In particular I see subjectivity, as the basis of "agency, a necessary part of understanding how people (try to) act on the world even as they are acted upon. Agency is not some natural or originary will; it takes shape as specific desires and intentions within a matrix of subjectivity-of (culturally constituted) feelings, thoughts, and meanings.

Ahearn (2000:12) suggests that scholars use agency, "as a way to talk about *the human capacity to act*" (emphasis in original). She embellishes this concept with several cautionary notes. First, "Note that agency in these formulations is not synonymous with free will. Rather, practice theorists[50] recognize that actions are always already socially, culturally, and linguistically constrained (2000:13). Second, "The level of analysis appropriate for scholars interested in agency should not automatically be considered to be the individual, since such a tight focus on individual agency is likely to render invisible larger social structures such as gender, race, and class that shape possibilities for, and types of, agency" (2000:13). Here we can see how intersectionality enters the discourse in terms of rendering invisible "larger social structures such as gender, race, and class that shape possibilities for, and types of, agency" (2000:13).

[50] Ortner defines practice theory as "a theory of the relationship between the structures of society and culture on the one hand and the nature of human action on the other" (1989:1; also see Ortner 1984, 1996). Ahearn elaborates writing, "The emphasis in practice theory is on the social influences on agency; human actions are central, but they are never considered in isolation from the social structures that shape them" (Ortner 2001:117).

Foucault has been criticized for his silence on the subject of agency within his writing about power, in which power centers in great detail on resistance. Ahearn (2001b:116) writes, “On one level, Foucault can be read as stating that omnipresent impersonal discourses so thoroughly pervade society that no room is left for anything that might be regarded as agency, oppositional or otherwise”. On the other hand, Ahearn (2001b:116) writes, “O’Hara (1992:66), drawing largely on Foucault’s later work, argues that Foucault proposes a model of agency that is “a matter of plurality, mobility, and conflict.” As noted previously Foucault is “not always easy to read” (Dore 2018:737), a sentiment Said (1983:246) seems to echo when writing about Foucault stating, “[t]he disturbing circularity of Foucault’s theory of power is a form of theoretical overtotalization…”.

The Paradox of Power and Agency

The inherent link between power and agency is that power is used in the domination-resistance dialectic to negotiate agency in pursuing projects**.** But this negotiation process does not take place in a one sided “social vacuum”, as Ortner (2006:152-151) explains below.

> Yet individuals or persons or subjects are always embedded in webs of relations, whether of affection and solidarity, or of power and rivalry, or frequently of some mixture of the two. Whatever "agency" they seem to "have" as individuals is in reality something that is always in fact interactively negotiated. In this sense they are never free agents, not only in the sense that they do not have the freedom to formulate and realize their own goals in a social vacuum, but also in the sense that they do not have the ability to fully control those relations toward their own ends. As truly and inescapably social beings, they can only work within the many webs of relations that make up their social worlds.
>
> Ultimately, the act of negotiating and enacting agency by an individual or

institution affects the agency of the others it rubs up against. Ortner (2006:153) states this paradox in more eloquent detail below:

> [T]the pursuit of projects for some often entails, necessarily, the subordination of others. Yet those others, never fully drained of agency, have both powers and projects of their own, and resistance (from the most subtle to the most overt) is always a possibility. Both domination and resistance then are, it seems to me, always in the service of projects, of being allowed or empowered to pursue culturally meaningful goals and ends, whether for good or for ill.

Definition of the Concept of Agency

At the risk of being labeled a reductionist, I suggest a simplified concept of agency, which I appropriate to combine both "agency of power" and "agency of intention"[51] (Ortner 2001:78-79). The definition of the concept of agency as "the socioculturally mediated capacity to act" (Ahearn 2001:112) or as Ortner (2006:16) suggests, "the interested practices of real people" seems to me an adequate starting point for conceptualization. At this point if we add the concepts of "agency of power" and "agency of intention", we arrive at a more fully formed concept of agency that can encompass the subtleties within which I deploy the term agency in this dissertation. That is to say, when I talk about agency, I am referring to the capacity to act within a given context in ways that fulfill wishes, desires, imaginings, hope, goals, and

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[51] Ortner (2006:145) makes an important distinction between agency of power and agency of intention, writing, "But the point of making the distinction between agency-in-the-sense-of power and an agency-in-the-sense-of- (the pursuit of) projects [intentions] is that the first is organized around the axis of domination and resistance, and thus defined to a great extent by the terms of the dominant party, while the second is defined by local logics of the good and the desirable and how to pursue them". She further adds, "Perhaps resistance is always of this nature: protecting projects, or indeed the right to have projects. I note again that the distinction between an agency of power and an agency of projects is largely heuristic. In practice they are often inseparable" (Ortner 2006:147).

perceived salient quality of life characteristics and outcomes.[52] This encompasses issues of dominance and resistance as well as intentions—and in fact as Ortner (2006:147) suggests, agencies of power and intentions (or projects) "are often inseparable". This concept of agency applies to individuals, groups, and institutions, such as the state and it desires to mold it subjects according to its ideology. In other words, I follow Ortner's conception of practice theory and its relevance to concepts of power and agency (see Ortner 2006).[53]

In the next section I use vignettes from my research to elucidate different aspects of gendered mobility presented up to this point.

Lived Gendered Mobility-Scapes Along the Border

Timure (context)

Timure sits just five km south of the Tibetan border (**Figure 4.2, research site**). Here new roads and hydro projects are bringing rapid change to an area that was historically one of the most important trade routes during the Trans-Himalayan trade period, before the border was sealed by the Chinese in the 1960s.

This borderland, inhabited by ethnic Tibetans who migrated to Nepal from northern border areas and the Tamang ethnic group, is daily evolving along a new trajectory of mobility.

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[52] These wishes, hopes, goals, etc. (which may be overlapping) are what Ortner (2006:152) refers to as "projects". She adds an important insight stating, "But from the point of view of the cultural analyst it is the projects that define the desires in the first place."

[53] I am neither an anthropologist nor a sociologist, hence I take full responsibility for inadvertently misappropriating or misrepresenting Ortner's and other authors' work I discuss in this section on power, agency, and intersectionality. My reading of these authors' work is at best cursory, another limitation of this dissertation.

It is peopled with Chinese hydro project bosses and laborers, Nepalese hydro project workers from the south, transport and trade entrepreneurs from Kathmandu,

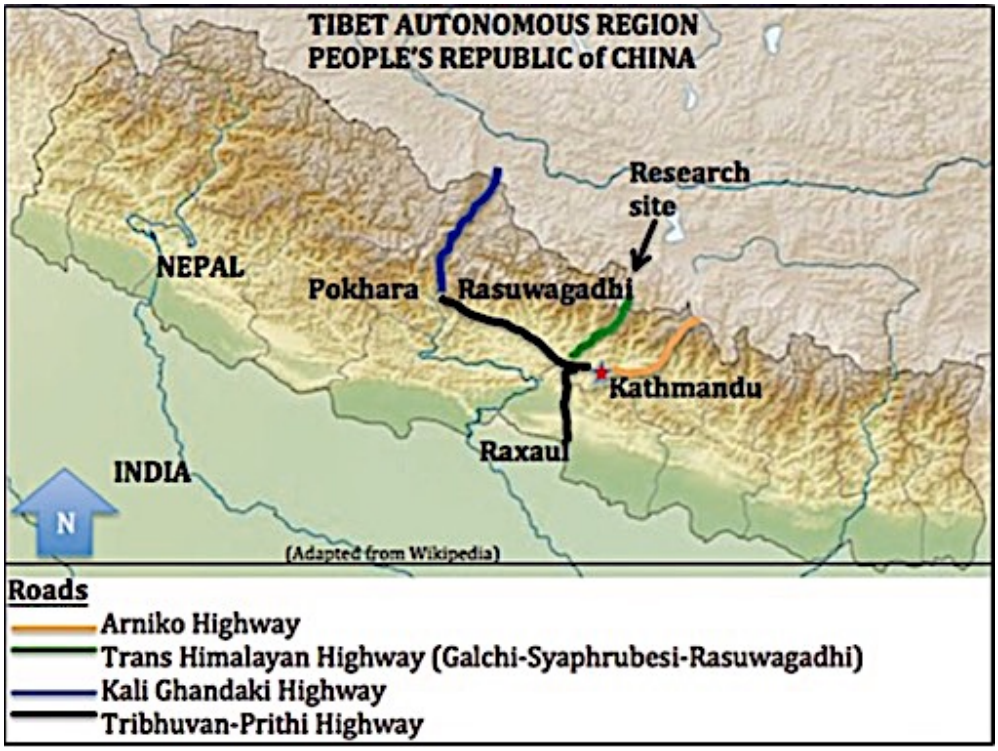

Figure 4.2 Map of research site (from Beazley and Lassoie 2017)

bankers, immigration and customs officers, Chinese/Nepalese translators, Nepalese army, civilian police, and armed police, explosives experts, jack hammer operators, and a colorful assortment of migrants seeking employment in this new hydro project mobility hinterland. The local border inhabitants struggle daily to cope with the changing landscape, new economic opportunities, and the waves of in-migration. Local *thulo manches* (influential/big men) and their co-conspirators meet to plot how to get their piece of the new economic opportunities. Newly bought motorcycles, dump trucks, four-wheel drive jeeps, and transport trucks line the dusty streets boasting of the power and prestige of those who have succeeded in the dealings thus

far. Rumors, wagers, backroom deals, and *raski*[54]-fueled skirmishes mixed with the dust, oil, exhaust, and construction noise, creating a hyper-masculine infrastructure border zone (**Figure 4.3**).

Amid this potent mix of masculinity, women are creating their own mobility networks using the virtual mobility of the cell phone to order goods from the nearest market town to be delivered to their house by truck. This new mobility has given them a sense of empowerment[55] as they open new restaurants and hotels while the men continue their plotting and motorcycle buying. Not to be one-upped, 'scooty girls' (Brunson 2014) can be seen headed to the border on their motor scooters to buy Chinese goods to sell in their new businesses. New employment opportunities for women have arrived along the new road with jobs in the hydro project office, in the new banks, as cooks and cleaners in the hydro project labor camps, and at the border as truck porters loading and unloading commodities. Female police guard the border with their male counterparts, women sign up for microcredit at the bank, and women are paid by the hydro project to be teachers in the local boarding school.

Timure is a very interesting place to unravel new gendered mobilities because there is so much activity at break neck speed. These new mobilities are the result of the converging of road, hydro project, trade-transport, tourism, and border mobilities.

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[54] *Raski* is the Nepali word for distilled grain alcohol, usually homemade.

[55] Here I follow Appadurai's (2004) concept of empowerment, which consists of both material empowerment and the capacity to aspire. He writes, "Here empowerment has an obvious translation: increase the capacity to aspire, especially for the poor "(Appadurai 2004:74). In this sense the women mentioned feeling a sense of empowerment due to their new physical mobility and the general increase of mobility, which brings new people into the area. Recognizing the potential source of revenue that can be generated by providing services to these new people they aspire to start their own businesses to raise their families' standard of living and escape poverty.

The new road arrived in 2011. Financed by the Chinese it connects the pre-existing road at Syaphrubesi to Timure and the border at Rasuwagadhi, a distance of 16 km.

Figure 4.3 In-migrant Nepalese hydro project laborers (Photo by author 2014)

The Chinese capital and labor are a 'gift of development' (Yeh 2015) that reflect a wider pattern of Chinese aid to Nepal and other Asian countries currently portrayed by Beijing as part of their massive Belt and Road Initiative (BRI) (a.k.a. One Belt One Road) to connect economic centers in Asia and Europe and beyond.

This 'handshake across the Himalayas' (Murton, Lord, and Beazley 2016) has been instrumental in funneling Chinese aid into the Trishuli Valley in the form of financing the above mentioned road with its flyover bridge connecting the two countries, hydro projects, further road construction and road rehabilitation in the aftermath of the 2015 earthquakes, and 'gifts' to Rasuwa residents of tea, salt, tin roofing, and aid to schools (Murton, Lord, and Beazley 2016). The Chinese financed

road has also opened up access to the upper Trishuli River and the subsequent beginning of the Rasuwagadhi HEP (111 MW), a Chilime Hydropower Company project in partnership with China Water and Electric (CWE), a subsidiary of SinoHydro. Additionally, Beijing has promised Kathmandu it will help build Nepal's new dry port near Timure and has already conducted a feasibility study for extending the Qinghai-Tibet railway from Kyirong to Rasuwagadhi (projected to arrive in 2020) and down the valley (Murton, Lord, and Beazley 2016).

With the border officially opening for commerce in December 2014 and the ensuing influx of trade-transport capital and financial institutions to support it Timure has been transformed (**Figure 4.4**). Formerly a peripheral forgotten backwater, where the presence of the state was most obvious in its absence and its neglect of investment in infrastructure and economic development, Timure now is awash in financial flows, state administrators, multiple infrastructure projects, state security forces, trade-transport entrepreneurs, domestic in-migrant laborers, Nepalese and Chinese hydro project administrators, managers and laborers, and Chinese, Indian, and western tourists. What Harris (2013) describes as "geographical blindspots", this border zone is now anything but that. Each of these different mobility pathways and their embedded overlapping constituents has produced a hybrid space of enormous proportions.

Converging Road, Hydro project, and Education Mobilities

The following vignette opens this next section.

We are sitting in a gravel parking lot outside the Rasuwagadhi HEP office in

Timure. In front of us is a makeshift stage with a line of seated dignitaries. We are surrounded by 200 villagers from neighboring communities who have all come to the final graduation ceremony of the woman's cooking course. These women and many of the villagers around us are *ayojanale prabhabit manchhe,* or 'project-affected people'.

Figure 4.4 Border opening ceremony at the new Nepalese customs office at the Rasuwagadhi border (Photo by author 2014)

As project-affected people, their women's groups requested a cooking course so they would be better educated in how to cook different dishes for different tourists' nationalities. Rasuwagadhi HEP, as part of their corporate social responsibility (CSR) mandate and with help from their Chinese partner, brought two chefs from one of the top hotels in Kathmandu to lead a 13-day culinary course. Underlying the women's desire for this course is both the real and imagined increase in tourism brought by the road, the border opening, and the hydro project. While it may seem strange to some,

hydro projects, especially domestically run hydro projects like Chilime, are a source of national pride and a Nepalese tourist attraction. The Chilime HEP in Syaphrubesi conducts daily tours of their facility that have proven to be very popular.

The other reality is that China is now Nepal's second largest source of tourist arrivals, second only to India. Chinese have been granted free Nepal tourist visas in exchange for earthquake relief aid from Beijing and daily there have been hundreds of Chinese crossing the Rasuwagadhi border (Samiti 2016b). Indian religious tourists and pilgrims are now also arriving because this crossing gives them closer overland connections to Mt. Kailash (sacred to both Hindu and Buddhists) than the previous overland route further east along the Arniko Friendship Highway. In August 2017 western tourists were given permission to cross this same border, which re-stimulated the popular overland tourist route from Kathmandu to Lhasa that was eclipsed after the closing of the Arniko Friendship Highway in the aftermath of the 2015 earthquakes and subsequent monsoon flood damage.

This trend is anticipated to increase with rumors that Beijing is not eager to re-open the Friendship Highway crossing because it was a main vector for Tibetans illegally crossing into Nepal—another reason for the increase in security personnel around Timure, including a new armed police force barracks in addition to the army and civilian police barracks. Across the border, the Chinese security forces appear even larger with a huge new three-story army barracks, a monolithic immigration, customs, and quarantine facility, and rumors of Chinese undercover police spies roaming both sides of the border (**Figure 4.5**). Nepalese border police warned us not to take pictures of the Chinese side per their counterparts' demand. After the road is

paved the number of tourist arrivals is expected to mushroom. The THT trekking route, which connects many of the villages here, has already brought a new wave of tourists since its opening in 2002 (TRPAP 2007).[56] Locals are well aware of tourism's benefits and are anxiously preparing for this new influx.

Figure 4.5 New Chinese customs and immigration facility (left) and army/security barracks (right) (Photo by author 2014)

As the ceremony proceeds, the twenty-two women who participated wearing traditional Tamang dress and a white chef's hat, walk to the podium to receive their official completion certificate (**Figure 4.6**). As the crowd applauds, the women are asked to sing a traditional Tamang song. As they sing, the pride on their faces is evidence of their accomplishment and their increasing layers of perceived identity as

[56] Visitor numbers to the Tamang Heritage Trail have been increasing every year. In its opening year 2002, the THT saw 1,220 visitors and by 2006 the numbers had increased five times to 5,276 (Kunwar and Pandey 2016).

Tamang women, project-affected people, and newly anointed chefs. The same identity as project-affected people is also proudly worn by the local men who have helped orchestrate other community develop projects financed by the hydro project such as new roads to previously road-less villages, electrification, and improved water supply, health posts, and schools.

Figure 4.6 Graduation ceremony for women's 13-day culinary course (Photo by author 2014)

After the presentations everyone is invited to sample their cooking in the community center. Dishes are labeled in Nepali and are proudly ladled on to plates by the women (**Figure 4.7**). The diners represent a diversity of actors composed of locals, Nepalese and Chinese hydro project officials, the district administrative head, and representatives of the security forces.

While chatting with one of the locals, I express how impressed I am with the food and the women's accomplishments. Interestingly, it is then that I learn that the

participants were all female except for one husband who the women requested to attend to write down the recipes because the women are all illiterate.

Again, here we see the importance of education as empowerment, which is underscored by the women's other request to the hydro project company to provide adult education and language lessons so that the women can read, write, and talk to tourists from different countries.

Figure 4.7 Women from the culinary course serving some of their specialties (Photo by author 2014)

For now, they have requested both English and Chinese lessons. This is emblematic of a wider trend in Kathmandu for Chinese language courses due to the massive rise in arriving Chinese tourists and the shift of gravity toward these trends that has led to development of a Chinatown adjacent to the largely western dominated Thamel tourist area in Kathmandu.

Chinatown is a sprawling hub of activity boasting new Chinese owned and

operated hotels, restaurants, shops, and Chinese language schools as well as Nepalese owned businesses catering to Chinese tourists. Signs with Chinese characters line the streets offering Chinese cuisine including hotpot and other popular Chinese delicacies. Nepalese tea has become a popular item for Chinese tourists. I encountered this first hand while buying tea from a Nepalese in Chinatown. While I was sampling different teas a large group of Chinese tourists and entrepreneurs entered. After smelling and tasting many different teas they eventually bought numerous large wholesale burlap sacks of different Nepalese and Sikkimese teas.

I point this out to highlight the importance of both Chinese tourists and Chinese interests for Nepal and specifically for the inhabitants of Timure and its surrounding area. It is not lost on these local populations in these hybrid spaces of converging mobilities that a Chinese orientation will reap economic returns now and in the coming future. This is tempered by the negative attitudes of the Tibetan refugees who settled in the five refugee camps between Syaphrubesi and Rasuwagadhi in the wake of the Chinese 'liberation' of Tibet and by ethnic Tibetans who settled in this area before that time. Here again we can see the imbricated influences of geopolitical, border, hydro project, tourism, and education mobilities and the hybrid spaces they synergize.

Syaphrubesi (see **Figure 3.1)**

Converging Road and Border Citizen Card Mobilities

Pema owns a hotel in Syaphrubesi. She grew up in Goljung, a village nearby in the Chilime River Valley. As resident of Rasuwa District living within 30 km of the China's Tibet Autonomous Region (TAR) border she has a border citizen card

(**Figure 4.8**). These cards allow holders on either side of the border to travel across the border up to 30 km without a passport or visa. These cards were instituted in 2002 to provide the state (Nepal and China) more legibility of those using the border areas who had traditionally crossed a formerly porous border (pre-1950-60) (Shneiderman 2013).

Figure 4.8 Border citizen card (Photo by author 2014)

It is recognition on the one hand of state sovereignty over borders and citizens and at the same time it also recognizes the lived livelihood spaces on either side of the border, peopled with transhumant agro-pastoralists who shared pastures for hundreds of years as well as engaging in trade. During periods of the Trans-Himalayan trade many Nepalese traders crossed into Tibet and lived there often taking Tibetan wives. Kyirong was one of the main trade towns 20 km north of the Nepalese border of

Rasuwagadhi (Shneiderman 2013). There is a small Nepalese community in Kyirong who own hotels, restaurants, and sundry shops. Pema's sister Drolma lives in Kyirong managing a similar hotel (with the same name as the one in Syaphrubesi) with a restaurant and a small store nearby. These two sisters manage their businesses cooperatively by using their border citizen cards and virtual mobility technologies (cell phones, computers, and the Internet). As Pema explained, "Nepali cookware[57] is popular in Kyirong. My sister keeps her shop stocked with it. When she needs more she calls me on her cell phone and I buy it for her. Then she comes with a truck to the border with Chinese goods that are popular here such as Chinese laundry powder, beer, liquor, cigarettes, chocolates, and ready-made clothes and we exchange". We can see here converging virtual, road, and border citizen card mobilities. "Many people in Kyirong like Nepali food so often I also give her some rice, lentils, and spices" she continues. In this way the converging mobilities have opened up a gendered mobility space in which the two sisters have collaborated to build a cooperative successful economic venture. It is a hybrid space that is embedded in geopolitical, economic, cultural, (trans) border, and gendered mobility components.

A similar gendered space is inhabited by women from Syaphrubesi, Dhunche, and Timure who travel once a week on foot, scooter, or by hitching rides to the Rasuwagadhi border to buy similar Chinese goods in the small market on the Chinese side. Again, an element of both the hydro project and tourism mobilities is present

[57] Many Nepalese people commonly use the word Nepali in both English and Nepali language to refer to things of Nepalese origin. Technically in English Nepali refers to the Nepalese language but in common usage in Nepal it is often used to mean Nepalese as in "Nepali cookware" which technically in English would be Nepalese cookware.

because these items are sold to Chinese hydro project workers, Chinese tourists, western tourists, and sometime Nepalese. Lhasa beer is half the price of the same size Nepalese beer and many Nepalese like Chinese alcohol because it is more potent then homemade Nepalese *raksi* and cheaper than commercially produced alcohol. Two girls on scooters from Dhunche we met at the border crossed on their scooter to buy similar items in addition to pickled chicken feet and pig ears both popular with Chinese men when they drink alcohol and smoke Chinese cigarettes (**Figure 4.9**). Almost every store we visited in Nepal along this border zone stocked these items as well as Chinese instant noodles.

Figure 4.9 Two girls on a scooter from Dhunche cross the border at Rasuwagadhi to buy Chinese goods for their store (Photo by author 2014)

While girls on scooters have become commonplace in Kathmandu this form of gendered mobility is now arriving in Rasuwa. In Syaphrubesi we saw two girls teaching each other how to ride and in Dhunche we observed a woman who uses her scooter to collect firewood (**Figure 4.10**). This appears to be the beginning of a

cascading ‘scooty girl’ gendered mobility that is moving from Kathmandu north to the border.

An enterprising Nepalese woman who has a shop on the Chinese side has created her own mobility pathway by selling Chinese goods to Chinese hydro project laborers. Chinese hydro project laborers in Timure while technically not allowed to cross the border, because they arrived by air in Kathmandu and must depart from the same port, wait at the border while she walks the goods across to the Nepal side. This gendered mobility corridor is nuanced with geopolitical and (trans) border mobilities. She has come to know the Nepalese border customs, immigration officers, and police and they do not force her to go through the legal procedures for her small amount of goods.

Figure 4.10 A woman in Dhunche using her scooter to collect firewood (Photo by author 2014)

Trade-Transport and Hydro Project Mobilities

In August 2014, I arrived at the border to a scene that at first looked like chaos.

Nepalese and Chinese trucks were lining the road. There was a flurry of activity as truck porters unloaded Chinese trucks and reloaded Nepalese trucks with Chinese apples, readymade clothes, electronics, thermoses, blankets, and plastic products. As I watched more carefully, I noticed that at least half of these porters were young Nepalese women (**Figure 4.11**).

Figure 4.11 Female Nepalese truck porters unloading a Chinese truck at the Rasuwagadhi border (Photo by author 2014)

As I began interviewing them, I discovered that most came from local villages. "We give preference to area residents first", the local labor organizer explained. "We have a list and when we need porters, we call them by mobile phone", he continued. "Women get paid the same wage as men. If we cannot find enough locals, then we phone southern connections who send up porters from the lowlands." After numerous interviews, I began finding both men and women who had migrated north to take advantage of this temporary boom.

The Rasuwagadhi border was opened prematurely because of a landslide that

had blocked the only other overland commercial border crossing at Kodari on the Arniko Friendship Highway along the Bhote Koshi River (see **Figures 3.1 and 4.2**). The temporary opening of the Rasuwagadhi border and the closing of the Kodari border had created a hybrid space where trade-transport mobilities from the east had been rerouted through Tibet to Rasuwagadhi and converged with trade-transport and migration mobilities from the local area, Kathmandu, and the south.

The hybrid space was enhanced by the local labor organization that had created gendered mobility not only for labor but also with gender equity wages. "We can handle all the loading the same as men and if there is something too heavy the men help us out", explained one female porter. Interestingly, I saw women carrying 25 kg bags strapped to their heads; hardly an indication that women often needed help with heavy loads.

In the Nepalese hydro project laborers' camps, we interviewed women who had been hired to cook and clean for the laborers (**Figure 4.12**). "We just arrived from the south," two of these women explained to me. "We will work as long as there is work available", the other chimed in. Admittedly this is work that women have always done in Nepal in the domestic household sphere but doing this for wage labor is a relatively new twist on traditional gendered workloads. The gender literature discourse about gender equality often centers on reproductive work being unpaid labor. While this labor was not being done in the household it was being done in arguably an extended household of male Nepalese laborers[58], and at the same time being paid for it

[58] I suggest that it is an extended household of male Nepalese laborers in that they are all living and eating together in their own housing complex, as well as working together. The

is a significant difference. I suggest that this is at least a beginning in a shift in consciousness about women's domestic work and its value.

Figure 4.12 In-migrant female cooks for the Nepalese hydro project laborers camp (Photo by author 2014)

Further evidence of the hydro project, road, and gendered mobilities appeared as we interviewed four women working in the Rasuwagadhi HEP field office. Here, the education mobility converged with the other mobilities as the women had to have higher than average education to be employed. We also found another example in Syaphrubesi at the Chilime HEP office. Dolma, when she was seventeen, was hired as an administrative assistant because she was one of the few students in Rasuwa District at the time that had passed her School Leaving Certificate exams[59]. At the time of the interview she had been working in her position for fifteen years. Both examples again point out the importance of education for gendered mobility economically, socially,

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Chinese laborers have their own separate labor housing camp further upriver, hence there is a distinct group sense of a Nepalese family of laborers.

[59] The SLC exams are taken after the 10th grade in the secondary school system and traditionally the end of formal scholarship for most Nepalese.

and by extension corporally.

Additionally, it must be recognized that this gendered mobility progression is undergirded by the previous coupled hydro project and road mobilities. It also hints at changes that may come from these mobilities converging with the border mobility within the geopolitical sphere with the Chinese government gifts of laptops and financial support (3.5 million Rs = ~ US$35,600) to the Syaphrubesi school as well as other schools in the area. These are in addition to Rasuwagadhi HEP and CWE supporting the local boarding school in Timure by hiring and paying teachers' salaries, at least two of which are women. Whether this will contribute to more Rasuwa students passing their SLC remains to be seen, but it is a significant boost in the quality of education previously available.

Many more mobility pathways could be traced connected to gendered mobility from interviews with female social motivators,[60] border police, Nepalese-Chinese translators, bank tellers, trekking guides, and business entrepreneurs[61]. These stories, like those above, speak to the complex and imbricated processes of coupled and converging mobilities that produce hybrid spaces and cascading effects.

Exclusion

As mentioned previously these gendered mobility pathways are unevenly distributed in Rasuwa. Obviously to benefit from the tourism mobility one has to be on or near a trekking trail and have the capital or connection to capital that would

[60] Social motivators are hired by hydro projects to serve as an intermediary between the hydro project and hydro project-affected people.
[61] In all these groups mentioned females were the interviewees, but there were also some males in these groups whose answers corroborated the females' answers.

make the shift to tourism feasible. In areas not near trails the tourism education mobilities cascading effect is not felt. Even within these hybrid spaces opportunities are uneven. Tibetan refugees and ethnic Tibetans who settled before the 1960s do not have Nepalese citizenship. This precludes them from the border citizenship card mobility and puts them at the mercy of the state in terms of mobility. They are also disadvantaged as many have never learned the *lingua franca* Nepali.

Up to now this arguably was not a major concern as Tibetan language was sufficient for most purposes within their communities but with the burgeoning hydro project-road hybrid economic spaces developing they are at distinct disadvantage in terms of reaping rewards. Ironically, while interviewing a Tamang women's group in Old Syaphrubesi where there is a long-established Tibetan refugee camp, the unevenness of education benefits was in favor of Tibetan children because a sponsored Tibetan boarding school had been established exclusively for Tibetan refugee children. Some of the women were complaining. "Why are the Tibetan refugees getting everything while we get nothing? Why do trekkers want to sponsor Tibetan refugee children and not Tamang"? she questioned. This brings in another aspect of mobilities—they are very context specific. While most Tamang children along LNP trekking trails had found sponsorship for school, in Old Syaphrubesi with its Tibetan Refugee camp, trekkers who are sensitive about the plight of Tibetan refugees visit the camp as part of their trek and end up sponsoring the camp's children instead of Tamang children. Geopolitical, cultural, and tourism mobilities converged embedded in perceived subjectivities in a way that included Tibetan children to the exclusion of Tamang.

In another instance a Tamang woman who did not have land title papers risked losing the *chorten*[62] on 'her' land where her brother's ashes were entombed per his last request. The partially Chinese-financed new Nepalese armed police force barracks under construction was encroaching on the chorten. An interview with one of the armed police force officers revealed that in his words, "Many of these people do not have a title for their land. That makes it government land so we can do with it as we wish". In many formerly 'remote' mountainous areas of Nepal the absence of the state made concern over land titles not a priority.

Now with the converging mobilities and hybrid space around Timure and the border, such concerns have become a lived reality juxtaposing the advantages and disadvantages of such hybrid mobility-scapes for homeland gazing versus frontier gazing actors (Kassam 2001). Of course, those who have land titles and are positioned well in the local power hierarchy with access to capital and connections can benefit greatly. A woman in Ghattekhola whose husband was deceased managed to sell a large tract of land at a good price to the hydro project for the construction of their new concrete offices and accommodations. Their current offices were housed in a building rented from local Tamang sisters. Land speculation is embedded in most infrastructure projects, especially coupled hydro project-road mobilities, because they both require substantial tracts of land. Education mobility here again comes into play—some locals have been taken advantage of due to lack of information and knowledge about the

[62] *Chorten* is a Tibetan Buddhist term used to describe a mound-like structure that was built to hold relics and used as a site of meditation. Larger chortens are often called *stupas*, as in the Boudhanath Stupa in Kathmandu. *Stupas* are referred to as *chedis* in Thai Buddhism.

worth of their land. Others became educated about the hydro project and were able to bargain for a better price.

It also must be acknowledged that hydro project construction brings with it boom labor periods while under construction and bust periods after construction is complete. This affects the economics of all the in-migrant labor force mobility actors—both men and women, Chinese and Nepalese. There is no single one outcome for mobility actors. I argue that education is a power mobility that influences and shapes individual mobility outcomes.

Conclusion

I have shown how gendered mobility intersects other converging mobilities and their hybrid spaces including historical precedents, road, hydro project, tourism, migrant, geopolitical, and border mobility vectors. These converging mobilities affect individual gendered mobilities in very context specific spaces. Some can access these hybrid spaces in ways that expand gendered mobility and others are excluded. Often access has a strong education mobility underpinning but at the same time education mobility is also very context specific as we saw from the example of Old Syaphrubesi where Tibetan refugee children were favored over Tamang. To look at just one mobility obscures the other mobilities that are at play. As Adey (2010:17) points out, "To speak of mobility is in fact to speak always of mobilities. One kind of mobility seems to always involve another mobility. Mobility is never singular but always plural. It is never one but necessarily many". Embedded in the education mobility are economic, geopolitical, border, hydro project, road, and cultural mobilities that all have an influence depending on the context. The context is linked to mobilities and

can change, as we saw with the Tamang woman and her chorten and the anticipation of economic rewards for those in Thulo Syaphrubesi who were aware of the proposed Langtang HEP.

The very nature of mobilities is change, which demands that we shift our focus away from a framework that is bound to sense of place in fixity to one that realizes that sense of place is also constantly in a process of being mobile, with the understanding that mobilities are also relative and relational. Because mobilities are always processual a snapshot view is deceiving and does not illuminate the intricately woven patchwork evolving in mobility-scapes.

A mobilities genealogy/history elucidates the many factors that shape mobilities trajectories. Due to the nature of mobilities predicting future mobilities is very difficult but we can find patterns that help us understand how mobilities evolved in the past, which might give us clues to possible plural mobility pathways in the future. In this chapter I have made gendered mobility more legible by focusing on the lived mobilities of women in a Trans-Himalayan power corridor.

One further point to be made is that all of the Tamang women that we interviewed stated they had no restrictions on their mobility, with the caveat that they needed to have a (presumably) household purpose for being mobile. I suggest, as I did in the literature review beginning this chapter, that this may in part be true because non-Hindu women's mobility is influenced by the proximity of their Tamang village to Hindu villages. Timure, where we conducted the interviews with Tamang woman is 15 km from Syaphrubesi, the next nearest village. Before the Syaphrubesi-Rasuwagadhi road was finished (2010) one had to walk between the two villages. At

that time there was virtually no economic or other incentive for Hindu groups to move to Timure and so I argue that strong Hindu influences that might restrict Tamang women's mobility were largely absent.[63] Now that there is a road connection, hydro projects, and intense trade-transport business this situation may change.

In the next chapter I examine how hydro project-road mobilities influence each other creating a new mechanism for bringing local roads to villages. Again, I use local voices to shine light on how locals carve out agency-scapes fashioning development trajectories in the absence of state development mechanisms.

[63] The most current census data (2011-before the road) shows that Timure's population was 423. The caste/ethnicity composition was: Tamang 283, Ghale 81, Newar 36, and other 23. While it is impossible to say what caste/ethnic groups constitute the "other" category, the only Hindu group mentioned above is Newar. It should be noted that Newar are considered the indigenous people of the Kathmandu Valley and they practice both Hinduism and Buddhism (Gellner 1986).

CHAPTER 5

HYDRO PROJECT MOBILITIES

"Before the road locals used to spend time with teachers and get advice from them and they would give them fresh vegetables but now they give their time to political leaders and business people—they are all profit minded now." (Timure villager)

We are sitting in the small restaurant of our guesthouse in Timure. For the last ten days while conducting interviews we have also been observing an interesting pattern of male mobile behavior. It centers on Tenzing, our guesthouse owner who appears to be a *thulo manche* (influential/big man) in Timure, and a group of his male friends. His status as a *thulo manche* is embedded in socio-political and socio-economic realties and imaginaries. The brand-new Enfield Bullet 350cc motorcycle outside the door is material evidence of his socioeconomic status. Enfield Bullets are more expensive than the ubiquitous Honda and Bajaj Pulsar 150cc bikes—an urban status symbol that has just recently made its presence known in Timure after the completion of the Syaphrubesi-Rasuwagadhi road in 2012, shortly after road construction began on the Rasuwagadhi HEP (111MW).

The coupled hydro project-road mobility created a hybrid space in which socio-economic, socio-political, and socio-cultural vectors converged making a rich space to cultivate place-making identities and subjectivities. Tenzing is one of the locals who landed on top and carved out his space as the local Nepal Congress party boss, trade-transport entrepreneur, and concerned community group spokesman. Tonight, his cohort has convened in his restaurant to snack on *sukuti* (spicy water buffalo jerky), drink *raksi* (local spirits) and Lhasa beer, and smoke Chinese cigarettes

while they discuss the politics of their newly fashioned identity as 'project- affected' people and its evolving political economy. At the other tables scattered around the room sit who we have come to dub the 'usual suspects'. At one table sits the army compound commander discussing military strategy interspersed with his spontaneous guitar strumming versions of John Lennon's *Imagine* and other popular western pop songs. To his left is the civilian police chief already well on the way to his ritual evening inebriation loudly debating the major's military tactics. Not far away Chinese hydro project laborers smoke corncob pipes and Hao Mao cigarettes (identifiably Chinese due to the blue colored filter) while drinking Wuliangye *baijiu* (Chinese distilled rice liquor) and playing cards (**Figure 5.1**). In the corner is a table of hydro project officials and engineers studying blueprints while eating *dal bhat* washed down with Royal Stag whiskey.

Figure 5.1 Chinese hydro project laborer smoking corncob pipe (Photo courtesy of Galen Murton 2015)

The room is full of boisterous voices, smoke, and male charged energy. In the small, attached kitchen several women huddle around the wood stove chopping vegetables and meat while another stirs several woks full of food. Every few minutes

our ‘waitress’, a young Sherpa woman, appears to service the calls in several different languages for more *raksi*, *baijiu*, whiskey, *dal bhat*, and/or noodles. Curious, our Nepalese field assistants move to sit near the *thulo manche*’s table to hear their discussion. After about an hour our assistants return with their findings. Tomorrow Tenzing and his colleagues are going to the Chinese laborers camp to speak with the Chinese Water and Electric (CWE) field boss. CWE are partners with Chilime Hydro Company (Nepalese) in developing the Rasuwagadhi HEP. They are going to request a watering truck to drive the road daily to keep down the dust that has become an ongoing annoyance for the community. The road will not be sealed for another year and with the volume of hydro project and trade-transport vehicles plying it, the dust has become unbearable.

These meetings have become a ritual, occurring several times daily and leading some women we interviewed to comment on a change in the men saying, “now that the road has come and the men have started businesses, all they do is sit around and talk about how to make more money. They buy motorcycles and drive around to meet each other and then drink and talk politics. They have become lazy” (Murton, Lord, and Beazley 2016:20). Interestingly, these local political-economic entrepreneurs have been successful in bringing about a number of community development projects in a borderland that has historically been ignored by Kathmandu. Viewed as a ‘remote’ periphery, the presence of the state was most obvious by its absence—turning a deaf ear to the requests for roads, better schools and health facilities, and other ‘modern’ infrastructure and amenities (Murton, Lord, and Beazley 2016). Now there are numerous new roads approaching local villages, schools have been upgraded, small

business workshops are held, and many new businesses are materializing.

So how have the local communities in this peripheral borderland managed to negotiate development spaces? How have they brought roads to villages that have requested roads from the government but were ignored? How have hydro project mobilities opened up a space of agency for local actors? In this heterogeneous cultural trans-border landscape what frictions are produced when different actors 'rub up' against each other negotiating a hybrid space rich in economic potential? How do locals react to the increasing Chinese influence and investment in Rasuwa and to the arrival of some 200 Chinese hydro project workers? What part do converging mobilities play in the daily-lived experiences of residents of a Trans-Himalayan power corridor?

This chapter addresses these questions, shining light on how hydro project mobilities evolve in the Trishuli Trans-Himalayan power corridor. I argue that in the political vacuum left by the lack of local elections for more than a decade, an array of actors has coalesced to fill the political space. With the increase in hydro project development in the Trishuli Valley the space has been further complicated and enriched. I suggest that coupled hydro project-road mobilities have enlivened a hybrid space laden with political economic tension that both challenges and reifies state formation. In the aftermath of a ten-year civil war and the ensuing political process of creating a federal democratic republic, 'messy' contested political spaces became dominated by local elites and special interests. I begin by adding historical context about roads and development in Nepal followed by a section on hydropower development, hydro project benefit sharing mechanisms, and local road building.

This background material is essential in understanding how the current hydro project mobility has evolved. The remainder of the chapter examines specific elements of hydro project mobilities and their actors to see how lived experiences negotiate this terrain. Seen through the eyes of these actors I trace the variegated constituents of the hydro project mobility through local hydro project-road building, spatial reorientation, scales of migration, land speculation, and 'gifts of development'. I suggest the mobilities framework I employ brings legibility to this necessarily messy, complex, and convoluted process providing purchase to analyze the frictions inherent in state making development trajectories.

In doing so I contribute to the call of Harvey and Knox (2016:65) for empirically rich ethnographies of infrastructure where "ethnography of how infrastructures configure contemporary politics" while "taking full account of how the contingencies of the everyday are fully implicated in this process". I show how a focus on mobilities can disentangle highly complex and contested development projects that from the outside appear as rational linear processes, but inside are anything but that. Using local voices, I articulate the seams and fissures that inherently exist in development projects and shine light on how local agency is fashioned by some while excluding others as they negotiate the daily lived experience in a rapidly expanding hydro project and trade-transport border frontier.

Far from simple and mundane, I elucidate how border lives have become imbricated in wider transnational geopolitical and political economic landscapes that are re-orienting historical alliances as Nepal pursues its future making trajectory to become, as former Prime Minster Baburam Bhattarai stated, "a vibrant bridge

between China and South Asia" (Kathmandu Post 2013).

Context

Hydropower in Nepal

Benefit Sharing

Under Nepal's Electricity Act 1992, the government is permitted to collect royalties from hydropower generation plants, 50 percent of which are allocated to regional governments to be used as they see fit for district and local development. Lack of transparency in this process has made it difficult for district (DDC) and local (VDC) governing bodies to access funds or plan for their use. As Shrestha et al. (2107:11) explain, "Even government actors complain about the lack of transparency, stating that the central government mechanism for determining and delivering royalty payments is essentially a 'black box', which few understand". Stakeholders are often unaware of the existence of the royalty mechanism and how it might potentially benefit them.

In addition to royalties some hydropower companies have started to offer a percentage of their shares in both private and public markets. While not mandatory it has proven expedient in reducing local opposition to projects, which have caused shut downs and conflicts in the past. The success of the Chilime HEP in Rasuwa has increased awareness of the profitability of investing in shares especially among local stakeholders.

Finally, while technically not benefit sharing, corporate social responsibility mechanisms for compensation and mitigation of project-affected areas have emerged as a perceived benefit to project-affected people—in terms of community development

projects financed by some hydropower companies. As part of their environmental impact statement, hydro projects are required to delineate the villages that different aspects of project construction will affect. Many of the hydro projects in Nepal are run-of-the river projects meaning that rather than building a dam across the river to impound water, these projects divert part of the river through a tunnel down to the powerhouse. The drop elevation along the tunnel creates the hydraulic head, turning the turbines to generate power. Different phases of the operation for both track opening and tunnel construction necessitate blasting. Blasting affects local populations in detrimental ways including dust, noise, landslides, vibration, and in some cases the relocation of households.

Building a Local Road

Beginning in the 1990s, participatory methods in development practices became popular in Nepal, reflecting a wider global pattern supported by the World Bank and other multi-lateral lending agencies. Institutionally this meant that local road-user committees received funds for road construction and maintenance. The capital was allocated by the state to address infrastructure needs contained in the District Transport Master Plan, which was written with input from the Village Development Committees (VDC). Labor-based, Environmentally friendly, and Participatory (LEP)[64], also called the 'green roads' technique, was promoted by NGOs as a win-win scenario where locals were paid to build the road with technical assistance.

[64] The term labor-based in the LEP framework means, "Work is done by human labour using simple hand tools (i.e., avoiding use of heavy equipment)" (Sharma and Wilson 2000:14).

Ironically, while this was supposed to generate local ownership, better maintenance, and sustainability, village politics often dictated the alignment of the road and method of construction, putting money in the pockets of local elites (Beazley and Lassoie 2017). The amount of funds distributed via this system steadily increased over the years to the point where, according to a World Bank report (2013:16), "The implementation through user committees forms 70% of all expenditure in the LRN [Local Road Network] and is similarly affected by irregularities due to a lack of accountability and proper supervision, in practice forming a means of avoiding tender procedures". Further manipulation of the system emerged in the vacuum left by suspension of local elections during the civil war and post conflict. In its place ad hoc governance was instituted, dubbed the All Party Mechanism (APM). Byrne and Shrestha (2014:442) describe the APM:

> As a post-conflict interim measure to integrate local politicians in decision-making, until such time as local government elections could be held, the Ministry of Federal Affairs and Local Development directed the creation of an 'All-Party Mechanism' at VDC and district levels. Such a mechanism had already been practiced informally in many localities. Each political party active in the VDC was invited to appoint a representative to the Mechanism, which served to advise the VDC. However, in the face of widespread allegations of corruption, the Ministry disbanded the All-Party-Mechanism in early 2012. Nevertheless, it continues to function 'unofficially' in many localities, including the VDC where our research is conducted (see also UNRHCO, 2011).

Road projects being highly prioritized at the local level are a material manifestation of how local governances gain legitimization. In the 'messy' political economy of the APM, mobility-scapes became highly contested "regimes of territorialization" (Wilson 2004). As noted above corruption is endemic. Local user

committees evolved along this corruption trajectory to the point where political party members and contractors outnumbered actual users making heavy equipment readily available and shifting the focus away from green road techniques. A World Bank report (2011:44) confirms this trend stating, “At the surveyed districts, more than 30 bulldozers were in operation constructing local roads which, in principle, were supposed to be built with local labor”.

Participatory norms still applied, as equipment norms for local roads were not established “resulting in cost savings and potentially high profit margins for contractors in case equipment is used” (WB 2013:26). As Rankin et al. (2017:14) point out, “Collusion takes the form of rigged bidding, in which minor parties consent to a particular contractor/major party winning the bid, in exchange for agreed-upon kick-backs to the other parties who ‘lose’ the bid”. In fact, use of equipment is prohibited under the prevailing acts governing rural road construction (WB 2013). These practices created their own political economy resulting in an exponential growth of rural road projects. A World Bank report (2013:17) clarifies the issue writing about the local road network (LRN):

> The result has been an explosive expansion of the LRN during the past decade, by far exceeding the targets set for the LRN in the *Rural Infrastructure Development Strategic Action Plan* (2007). The technical standard of these roads has been poor, however, resulting in half the network currently being considered inoperable.

Here we can see how roads become imbricated sites of contestation embedded in heterogeneous scalar spaces of “governance and planning, political subjectivity, and cultural politics” (Rankin et al 2017:1). It is within this complex hydro project-road

coupled mobility nexus (as evidenced in the opening vignette) that I situate this chapter.

Lived Realities

Kumar is 58, has two sons and a daughter, and is head of the local road committee. In their village (Archali, **Figure 5.2**) they can see the main district road across the Trishuli River that arrived in the 1980s but so far, they have not been successful in their attempts to get the government to build them a feeder road. Interestingly, new mobility-scapes began to open as new hydro projects entered the valley. To access their project sites several different hydro companies were instrumental in building a bridge across the river from the main district road and then continuing a feeder road along the river upstream 15 km. The feeder road now serves four different hydro projects—the Trishuli 3A and 3B, Mailung, and Upper Trishuli 1 HEPs (**Figure 5.2**).

Kumar's village sits on a hill overlooking the feeder road. Shanti Bajar, now on the feeder road, is the nearest market town—a 20-minute walk down the trail from the village. A local bus services Shanti Bajar (Figure **5.2**) and further connections to Kathmandu.

This has made locals' lives easier as they no long have to carry their supplies from the main district road across the river to their homes. Nonetheless, for those living along the trail on the hill, there is still considerable effort expended in getting commodities from Shanti Bajar uphill to their homes. Understandably, the villages along the hill trail would like a road. During an interview Kumar explained to me how they recently negotiated a track opening that will eventually be a ring road connecting

several villages along the hill trail saying, “After we learned the hydro projects have given money to the DDC we held a meeting to form a village road committee”.

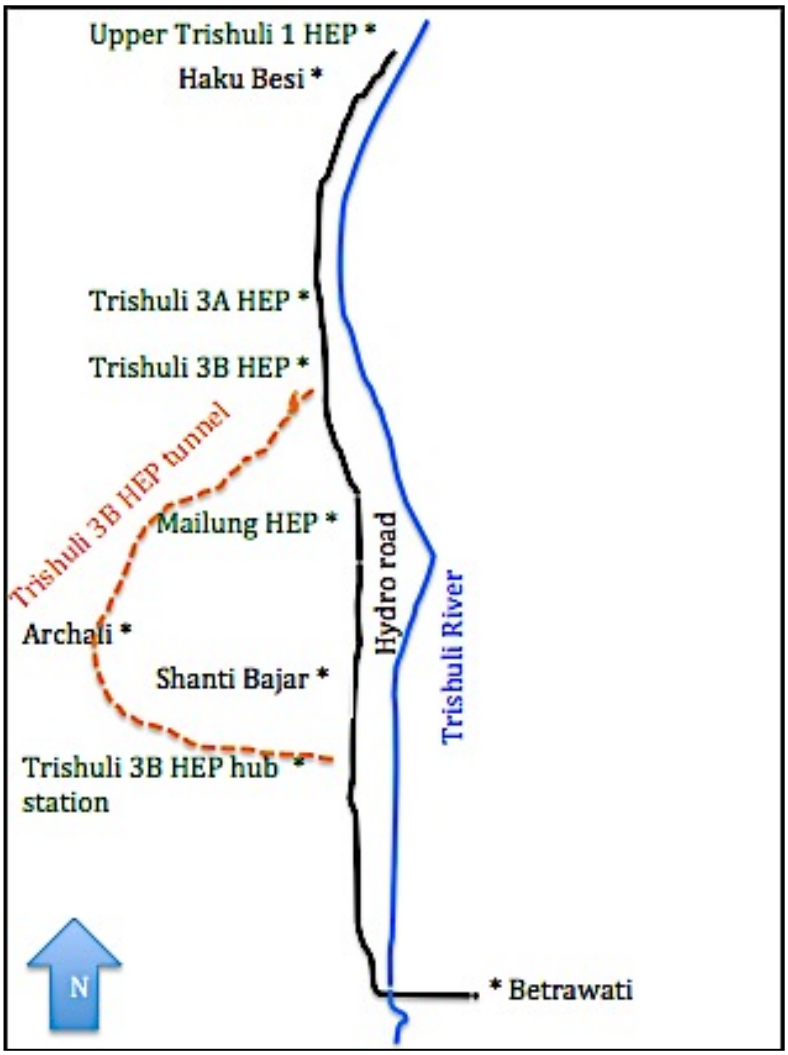


Figure 5.2 Hydro project-built road along the Trishuli River connecting hydroelectric plants

For the most part, villagers in the Trishuli Valley are very well informed about their rights as project-affected people and hydro project benefit-sharing mechanisms. Commenting on this Kumar continues, “This began during the war when the Maoists showed us how to block the Chilime office”. This is emblematic of a wider movement

across Nepal where Maoist cadres organized *bhandas* (protest strikes) that blocked roads and shut down businesses to force change.

This tactic proved highly effective as it enlisted the help of villagers, increasing the Maoists' numbers substantially. Fights between villagers and police would often turn violent with the police retreating beleaguered and outnumbered. In 2009 villagers from three different VDCs locked the Chilime HEP in Syaphrubesi in protest because Chilime was not offering them as many shares as they had promised (Himalayan Times 2009). The settlement set a precedent whereby Chilime agreed to sell public shares in the company with 10 percent going to the local project-affected district and 15 percent to the general public (Shrestha et al. 2016). As one projected affected person in Syaphrubesi who was involved describes (Lord 2016:155-56):

> The political leadership was poor, and they were earning money from the project as contractors, while the public was still deprived of many facilities, and they were planning on giving shares from the project to their own near and dear. Therefore, we locals united together and organized protests: We made demands of jobs, drinking water, everything. People from all three Village Development Committees (VDCs) and all three political parties [Nepali Congress, United Marxist Leninist (UML), and United Communist Party of Nepal-Maoist (UCPN-M)] formed the committee, and we went to the Supreme Court and led the case with the demand of 10 percent shares. The Supreme Court issued the interim order so they had to stop shares issuance while the case went on for two years and then finally we won the case. It was decided that we will get 10 percent shares, and the Supreme Court gave a directive to GoN [the government of Nepal] to formulate a law to provide 10 percent shares to locals in all [publicly traded] hydropower projects.

Many villagers invested in these shares, which have done very well over time. This story is well known in the Trishuli Valley, Kathmandu, and now virtually every valley in Nepal slated for hydropower development. This, in effect has created a project-affected political economy. In this new political economy, formerly 'remote'

peripheral spaces are shifting the socioeconomic gravity away from Kathmandu's historically narrow focused exclusive development trajectory toward place-based marginalized communities.

People like the Tamang, who for decades were exploited by extractive government policies of corvée labor (Holmberg, March, and Tamang 1999) found both agency and a 'voice' in Nepal's new emerging "hydro power nation" (Lord 2016). But as Murton, Lord, and Beazley (2016:11) caution, "In Rasuwa, the 'gift of development' is exchanged across scales, from macro-level geopolitics to micro-level individual agencies, and with highly uneven outcomes across these scales".

Kumar explained the process further. "We went to the DDC [District Development Committee] to request money for our road from the money the hydro project gave to the DDC. We got one *karod* [~US$ 9,7500] for the road and other projects—40 *lakh* [~US$ 39,000] for road, 50 *lakh* [~US$ 48,750] for school, 10 *lakh* [~US$ 9,750][65] for drinking water". Then, he addressed the lack of transparency in the royalty mechanism adding, "Still now we have not got the money, so we used some of our own and borrowed from friends and relatives". But he assures me they will get the promised DDC money in three installments.

Engineers from the hydro project and the DDC did a detailed survey for the road, which was included in the three documents they wrote for the rural committee, the DDC, and the district engineering office. The documents were filed and approved. Echoing the World Bank report (2103) mentioned above Kumar continued, "With the

[65] These are 2017-2018 exchange rates.

money we were able to collect we rented a bulldozer and driver in Kathmandu and started working on the road". When I asked who decided where the road would go he told me the local road committee decided, but in reality, with the *ad hoc* nature of this kind of construction, they sometimes would just point where they wanted the road to go and the bulldozer would follow. He also volunteered that in places where the road took land, households have given for free.

When I saw the road during the monsoon season it was a slick muddy and rutted mess. It was obvious no four-wheeled vehicles could drive it and only the best motorcyclist even attempted it; even post monsoon it did not look much better (**Figure 5.3)**.

Figure 5.3 Kumar's local road under construction post monsoon (Photo by author 2014)

Again, this reiterates what the reports mentioned previously and is typical of the wider status of rural roads in mountainous areas of Nepal where there are rules and guidelines in place for road construction, but which are rarely enforced; subsumed

within the numerous scalar landscapes of regional, district, and local geopolitics and political economies (Beazley 2013). As Harvey and Knox (2017:345-46) in their ethnography of roads highlight, “The whiff of corruption swirls around road construction projects”. And as we experienced with our interlocutors, “the history of any particular road would always at some point lead to a discussion of theft, embezzlement, nepotism, and shady dealings of one kind or other” (ibid).

Remarkably, while their study was conducted over a decade of research on roads in Peru, their findings mirror much of what has been discussed above and will be further illuminated below. As they point out, “Private interests are commonly assumed to derail the process: politicians and construction companies take a cut; contracts and sub-contracts are circulated through friends and families; funds and materials are siphoned off by those who hold positions of responsibility” (Harvey and Knox 2017:345-46).

The entire area along the new hydro project-road, including villages on the hill trail above the road, is designated as project-affected. Kumar’s village is affected by both the Trishuli 3A and 3B HEP. Furthermore, the 3B tunnel is projected to go directly under the village at a depth of 100 m (see **Figure 5.2**). As part of hydro projects’ profit sharing and corporate responsibility mechanism, royalties are paid to the DDC. The DDC can then use this capital on community development projects allocating some to the VDCs.

In addition, project-affected people can lobby the hydropower companies directly through concerned community groups for specific village projects. Not surprisingly, the most common request is for a road to their village in addition to local

employment, better water supply, and upgrading schools and health facilities. For example, in the Initial Environmental Examination (IEE) for the Trishuli 3B hub station, under section 8.3.16 Enhancement Measures there are four programs: 1) Agricultural Intensification Program and Vegetable Farming, 2) Health, Sanitation and Safety Program, 3) Skill Development Program, and 4) Resettlement and Rehabilitation. The first two programs are educational training programs, the third is an awareness program, and the fourth concerns households that may need to be resettled. The skills program includes training in "sewing/knitting, driving, electrical/house wiring, computer in their own localities"[66] with a budget of NRs. 1,380,000 (~ US$13,500). "This training will enable the PAF [Project-Affected Family] members in getting suitable jobs during and after the construction" (NEA-ESSD 2014, Chapter 8:6). Following the above section is the Corporate Social Responsibility section (CSR) (NEA-ESSD 2014, Chapter 8:6) as reproduced below:

> **8.3.18 Corporate Social Responsibility (CSR)**
> As a corporate responsibility the proponent has allocated some money for the betterment of local people. The total CSR cost is estimated to be NRs. 20,00,000[67] [~ US$19,580]. Following are the sectors covering as CSR:
> **School Support Program**
> Financial support will be provided to Tribhuwan Secondary School for construction of physical infrastructure. The total amount for this provision is NRs. 15,00,000 [~ US$14,685]
> **Health and Sanitation Program**
> Existing health post in the affected VDC should be strengthened in association with the District Public Health Office. The total amount for this provision is NRs. 5,00,000 [~ US$4,895].

[66] Note, the document does not state whether or not the different skill allocations are based on gender.
[67] Note, in the Nepalese numerical system commas are used differently than in the western numerical system. For example, 20,00,000 in the Nepalese system is equivalent to 2,000,000 in the western system.

As Kumar has learned directly, land values increase around both road and hydro projects. Unfortunately, he learned the hard way when he sold property to land speculators for what he thought was the going price at the time, three ropani[68] for five lakh NRs. (~ US$5,000). Unaware then that land was being acquired in the area for the future Trishuli 3A project he thought he made a good deal. A year later land prices had skyrocketed as news spread about the project with property selling for ten times what he had negotiated (Murton, Lord, and Beazley 2016).

Several years before he also missed his chance to buy stock in the Chilime HEP because at the time his grandson had a major health complication that required all of his attention. News about hydro projects now travels fast in the valley with the addition of numerous other projects underway, but how that news is couched and who hears it is still a very uneven process. The cultural politics of hydro project-road coupled mobilities reifies these uneven spaces in physical and social landscapes. As Rankin et al. (2017:15) posit, "Road-building is a contested sector of local governance in which prevailing cultural politics may either flourish or face challenges". Building on this assertion I would add that due to the coupled nature of hydro project-road mobilities 'hydro project building' also falls under this purview. Ironically, where Kumar faced challenges with hydro project land and shares acquisitions, he learned enough in the process to at least get a promise of money for their road, if not the actual cash in hand in the moment.

Similar negotiations are ongoing in the other project-affected villages along the

[68] 1 ropani = 508.74 m^2 (5,476 ft^2)

hill trail with hopes that eventually there will be a ring road that connects all the villages to the main road below, "…depending on the particular constellation of social forces" (Rankin et al. 2017:15). Villagers, who have seen their hopes vanish with the almost yearly change in national governments, ensuing change in ministerial appointments, budgets, and local party affiliations and influence, have come to regard hydro projects as a more enduring institution on which to project their imaginaries. As hydropower anthropologist Austin Lord (2016:151) observes, "In Rasuwa and other northern districts, the hydropower complex has proved more durable than local officialdom and more effective in 'bringing *bikas*', providing the roads, jobs, health posts, educational improvements, and other services that the government has failed to deliver". Trajectories of this coupled hydro project-road mobilities have re-oriented subjectivities in a hybrid space where local agency emerges in a material and social landscape "lived as a space of familiarity stretching between kin, friends, and trusted establishments" (Joniak-Lüthi 2016:4).

When I asked Kumar what he thought of the hydro project he was ambivalent, "It's O.K., not good or bad. It is good for development, but they need to provide more jobs for local people". Interestingly, while the 3B hub station project has not yet started the IEE under 6.4.1 Local Employment (ESSD 2014:VI-7) states:

> One of the major beneficial impacts of the project during the construction phase is the creation of employment opportunity. Altogether, 50 people will be deployed during the construction of the project, which includes 25 unskilled, 15 semi-skilled and 10 skilled manpower. In this regard, the employment opportunities contribute to poverty alleviation to some extent. The magnitude of impact is considered to be moderate, extent is local and duration is short termed.

Employment opportunities for local residents are probably the second most requested

item from project-affected people after local roads. One job that most projects hire locally is a social mobilizer. Social mobilizers act as a public relations officer between the hydro project and the local project-affected people. An online posting for CEDB Hydropower Fund Limited[69] listed the following about the social mobilizer job.

Job Specification

Education Level: Bachelor

Experience Required: Not Required

Other Specification

- 3 yrs of exp in Liasion & PR
- Familiar with Nepal Government rules.
- Strong problem solving skills.
- Extremely accurate, detail oriented, and organized.
- Excellent written and oral communication skills.

Job Description

- Responsible for Liaison & Public Relation.
- Responsible for handling purchase of land, land related issues.
- Keeping the management updated about the issues with Locals which may affect the Organization positively/negatively and help to identify the hurdles.
- Maintain and keep good relation with Engineers, Contractors, Consultants, and Supervisor, Management.
- Report Supervisor regularly.

Kumar's son Ram had a job as a social mobilizer for six months working for the Mailung HEP, a 30-minute walk from his village. One of his first tasks was to convince the people of Mailung to let the hydropower company cut the trees in the neighboring forest to make a right of way for the transmission lines. "When I approached them about it, they said, 'You are our neighbor why are you causing problems for us?'" he explained. "So, I went to the district forestry office (Dhunche) and got permission to cut the trees—then the Mailung people got really mad at me and

[69] https://www.ramrojob.com/jobs/public-relation-officer-social-mobilizer-17987

started throwing rocks at people from my village". He outlined the hydro project's strategies for dealing with opposition from local people.

The first strategy he described was for the hydropower company to pay social mobilizers not to inform locals about parts of the project that they might object to. If they already know about something and object to it then they have the social mobilizer sow seeds of discontent between neighboring villages to distract them from what they are opposed to. "If the project creates a bad reputation between neighboring villages it is easier to get the project done", he explained—which is exactly what happened with the rock throwing between Mailung and his village. "There is always conflict in villages around projects because of this—the PR person is usually a local person from one of the villages and other people may be from different political parties—so there is always tension", he continued. "The project always pays the PR person not to bring demands from villagers so the project can claim they do not know about it".

In essence then the social mobiliser is paid to spread disinformation in favor of the project. "It is like that in every village where there is a project. I quit after six months because it was too stressful!" he finished. Demenge (2011:5) comments on a similar dynamic with road building in Ladakh saying, "Evidence further indicates that engineers and contractors rely on the same internal mechanisms to suppress dissent and create consensus around a single road trajectory".

From the outside, the job seemed like a good opportunity for Ram, but once on the inside it was not worth it. He did not like sowing discontent between local villages especially because he grew up there and people knew him. He was ruining his own reputation and by extension his family and his village's reputation. Interestingly,

infrastructure is embedded in social relations and becomes contested multi-socio-cultural and socioeconomic terrain in wider-scalar geopolitical landscapes. Mostowlansky (2017:44), studying roads and infrastructure in the Pamirs, comments, "By making it a lived, essential part of their biographies, they also emphasize the affective qualities of their relationship with a road that stands for promise and loss, provisioning and hardship".

Following Mostowlansky (2017), I argue that hydro project-road mobilities are a lived relationship that local populations experience through contested social negotiations of becoming *bikasit* (developed) in modernist imaginaries grounded in "promise and loss, provisioning and hardship" (Mostowlansky 2017:44). In other words, local stakeholders' lives are enveloped in a fetishization of infrastructure vis-á-vis historical state development trajectories. These trajectories are now specialized state spaces of transnational hybrid mobility landscapes. In these landscapes, local agency is a lived mobility-scape of contested heterogeneous cultural negotiations. *Bandas* (strikes), physical confrontations, information gathering, and rights negotiations are daily-lived realities for local populations as they "move in and out of spaces of *bikas*" (Pigg 1992:510) in Nepal's emerging hydropower nationhood. Local citizens' negotiations to become "an agent of *bikas* rather than one of its targets" (Pigg 1992:511) also simultaneously re-orient center-periphery legacies that kept this 'isolated borderland frontier' from becoming a *bikasit* homeland of its constituents.

As Murton, Lord, and Beazley (2016:10) state, "Highly aware of both the uneven, fleeting landscape of foreign aid and the extractive/corrupt political–economic networks responsible for receiving and deploying *bikas*, differently enabled locals

position themselves and mobilize opportunistically to ensure their benefit from these projects". Demenge (2012: 5-6) echoes this positing, "Although the trajectory of the road is said to reflect 'the willingness of the village', negotiation processes tend to create consensus based on existing power relations".

As we move north toward the border a similar hydro project-road mobility trajectory can be seen in numerous other project-affected villages (**Figure 5.4**). At the confluence of the Chilime and Trishuli rivers (**Figure 5.4**) two new hydro project-roads are inching their way toward villages. One road moving west along the Chilime River is headed toward Tatopani, a popular domestic and international tourist destination on the Tamang Heritage Trail (THT) with a natural hot spring. The other hydro project-road is headed north along the Trishuli River to Thuman (**Figure 5.4**), another village on the THT. The road to Tatopani (**Figure 5.4)** is in question because of rumors from locals and hydro project officials. Chilime HEP has two hydro projects on the Sanjen River, a tributary of the Chilime River. They have opened a road up the west side of the river to their project site. The Sala Sungi HEP has a project on the same river near the Chilime project. Chilime officials claim the road to Tatopani is not for the hydro project but was requested by local projected-affected people affected by the Sala Sungi HEP. According to a local teacher we interviewed the people in the area were never told about the new hydro project and only found out when they questioned engineers who were surveying the area. Subsequently, the three project-affected VDCs all demanded roads from the project.

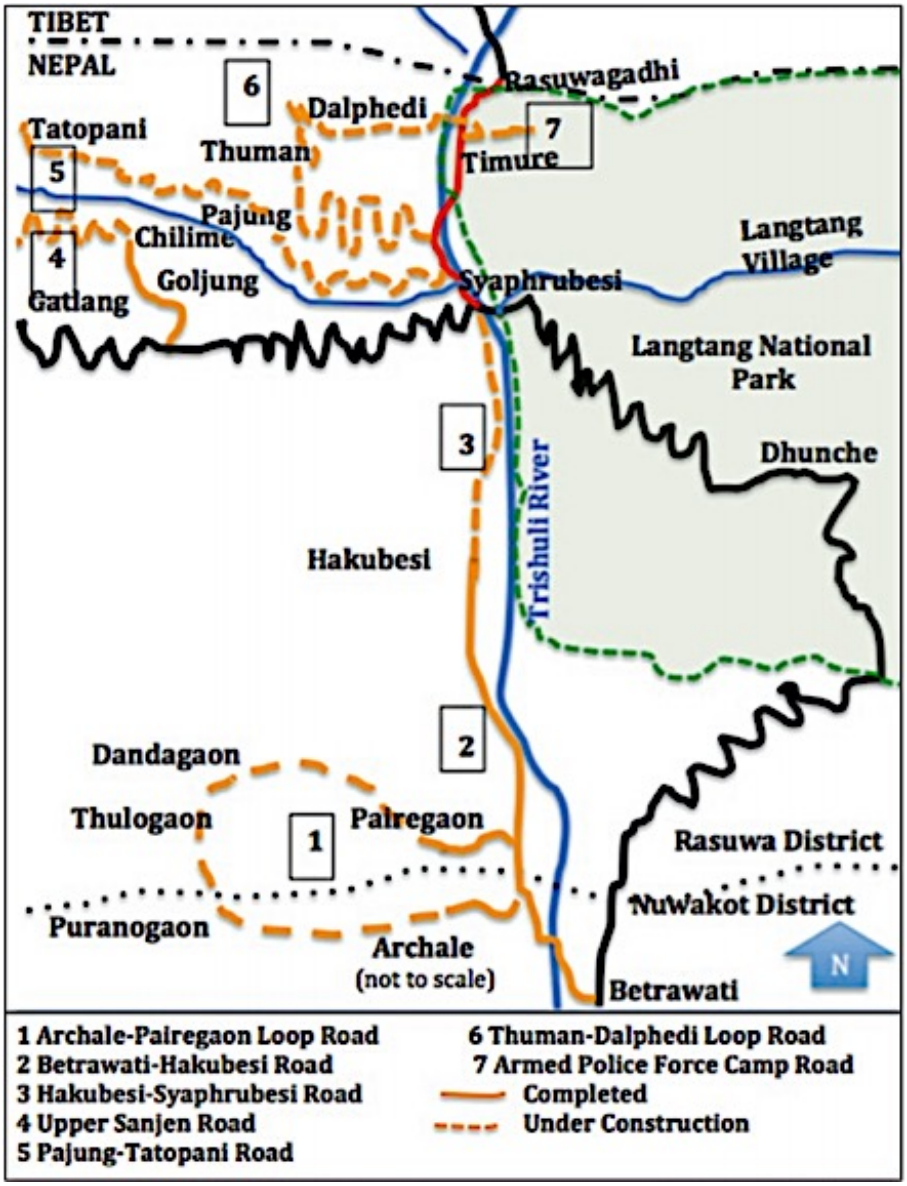


Figure 5.4 Local hydro project-roads in Rasuwa and Nuwakot Districts (from Beazley and Lassoie 2017)

The Rasuwagadhi HEP is building the road to Thuman for the project-affected people of the village. To leverage Rasuwagadhi HEP to build the road, people from Thuman obstructed work on the Rasuwagadhi HEP for a week until management agreed to pay for the road.

This strategy has worked well in the Trishuli Valley because as the managing

director of the Rasuwagadhi HEP field office told us in an interview, “The main problem for Nepal hydro projects is the local people problem. We want to address local issues quickly so they will not to slow down the project”. When interviewing the head of the Thuman Concern Committee[70] he said, “Thuman is the place of my ancestors—I loved it; I came back from Kathmandu—my main aim is to build the road to Thuman because the road is the key to all development”. He was a successful restaurant owner in the Thamel tourist area of Kathmandu, but he sold it, “to do social service for the local community—I am trying my best to bring the road to Thuman—it will be 13.5 km from the main road to Thuman and will take 1-1.5 years to complete”. Other demands by the concern committee from Rasuwagadhi HEP include a women’s vegetable farming workshop and a hotel management school. He is confident that tourism will continue to increase in the area. “Thuman has its own identity with the Tamang Heritage Trail and Thuman VDC can produce rice and everything—all we are missing is a road. The Chinese road [Syaphrubesi-Rasuwagadhi] is very good for tourism because of easy access to get here—tourism is increasing in the area now”.

This is a common sentiment in villages along the THT. They see hydro project-road mobilities as a win-win because it not only provides connectivity to their village with the main road to Kathmandu but will also increase tourism. When questioned about whether it would decrease trekking tourism the response was either that they will build the road so that it does not interfere with the trail or they point out

[70] Villages that are in what are designated as hydro project-affected areas often organize concern committees to deal with the villages’ concerns related to the impact of the hydro project on the village. An aspect of their concerns is how to negotiate community development projects as part of the corporate social responsibility mandate of the hydropower companies.

that Nepalese tourists do not mind having a road in a trekking area.

Present in their minds is the exponential growth in Chinese tourism (the second largest tourism arrival nationality [Kathmandu Post 2016]) and now that the Rasuwagadhi border is open and the Arniko Highway border is closed, all Chinese overland tourists come down the Trishuli Valley. They expect this will increase even more when the Qinghai-Tibet railway from Shigatse reaches Kyirong in 2020 (covered in more detail below). Even now Chinese tourists take the train to Shigatse and then come overland to Rasuwagadhi. In addition to the road, Rasuwagadhi HEP has also provided electrification, funds to renovate the village *gomba*,[71] and two computers and a photocopier for the local school. But still there is contention in the village about what other demands villagers should make. "Thuman people are not united now for social things but if we get united, we can facilitate *bikas* from the project"; another interlocutor from Thuman stated. "Even though we will be having a road", he continues, "we will not get compensated for the land we lose from the road".

When asked about what changes will come in the future another respondent commented, "There will be some changes like motorcycle instead of horse, modern dress, and more house building in cement". These are all changes that have been noticed in Upper Mustang after the recent arrival of roads there (Beazley and Lassoie 2017), which I discuss in the context of 'off-road enthusiasts' below. Ironically, when asked about future changes almost every respondent assured us that, "Buddhist culture is strong here; it will not change".

[71] *Gomba* is a common word (derived from Tibetan) used in Nepal to refer to Tibetan Buddhist temples.

This is underscored by a recent urban trend of off-road enthusiasts. The first four-wheel off-road event was held in Shivapuri National Park just north of Kathmandu in 2014. In a newspaper interview (Sigdel 2014) about the event, one of the founders of the Yeti 4WD Club, which organized the event said, "Adventure tourism has great potential in Nepal and not just for foreigners. People in the valley are just as enthusiastic". The route traversed Shivapuri National Park and ended at the Gorkana Forest Resort. A tourism entrepreneur present added, "Having participants drive through the national park gave them an idea of the flora and fauna and created awareness as to how we can give back" (Sigdel 2014). In 2017 an off-road enthusiast company, *Imagine Nepal*, organized a group of 80 off-road enthusiasts consisting of 24 SUVs and four motorcycles to traverse the Besisahar-Manang road in the Annapurna Conservation Area Project (ACAP). In their YouTube video[72] they can be seen driving convoy style over the rough road, testing their skills at shifting and braking as well as doing 'donuts' in a swirl of dust near Pisang.

Several of the enthusiasts, after watching cultural events staged at their guesthouse, comment with amazement on how strong the *Manangi* culture still is. I argue that they failed to realize (or acknowledge) that one of the most important reasons *Manangis*[73] have been able to maintain their culture is because until recently (2015), there has been no motorable road all the way to Manang.[74] The road to Manang has been a long-term project, which initially was part of the overall state development goal of connecting all 75 district headquarters by road.

[72] https://www.youtube.com/watch?v=FDxvK1Xd-VM&t=813s
[73] *Manangis* is a term used to refer to the inhabitants of Manang District.
[74] See Beazley 2013.

The road has been instrumental in opening the Upper Marsyangdi River Valley to hydropower development with numerous hydro project feeder roads emerging to access project sites. The coupled hydro project-road mobility is bringing *bikas* to the valley and with it, new forms of tourism (Beazley 2013). In another newspaper interview (Lee 2015) the tourism officer at ACAP stated, "The motorable road is the most important infrastructure development for the livelihood improvement of local communities. However, care should be taken to minimize the negative impact on the environment".

Interestingly, the "Imagine Nepal" webpage has an artist's renderings of the Himalayas, men on horseback, chortens, Tibetan prayer flags, and a jeep with "Explore the Unexplored" in big block letters (**Figure 5.5**).

Figure 5.5 Advertisement for "Imagine Nepal" off road enthusiast expeditions (Source: http://mnsevents.com/imagine-nepal/)

Above this is what looks like a passport stamp and "Manang Conquered" in the same large font. Scrolling down, the next drawing is of two Buddhist monks playing ritual horns with the words "One destination at a time. This Time for Lo Manthang", followed by "The Route - Journey for 1000 miles are not completed at once. We are back again to conquer the remaining". Their 2017 destination was Lo Manthang the ancient capital of the Kingdom of Lo (now called Mustang), formerly part of a Tibetan Kingdom and a semi-autonomous state in Nepal for centuries-generally considered one of the most 'exotic' tourist destinations in Nepal. Before 2015 the only way to visit Lo Manthang was by trekking or on horse (Beazley and Lassoie 2017).

Now, with a new dirt track all the way to the Tibetan border the face of tourism is changing in Mustang as it is in ACAP. Whether *Manangi* and *Loba*[75] culture as well as the environment of the ACAP and Upper Mustang is strong enough to withstand what roads bring remains to be seen. The same can be said about the Tamang culture and environment along the THT. This calls attention to the contingent co-constituted material and imagined power of roads and infrastructure in general. As Reeves (2017:713), in her study of roads along the Kyrgyzstan-Tajikistan border reminds us, "the material form is always exceeded by the hopes and fears that are invested in it". Or as Larkin (2013:329) suggests that infrastructures "store within them forms of desire and fantasy" in what he calls the "The Politics and Poetics of Infrastructure".

The next group of guesthouses west on the trail, Nagthali, did not have electricity and received solar units from Rasuwagadhi HEP for the time being until

[75] *Loba* is a term used to refer to the local inhabitants of Upper Mustang-formerly the Kingdom of Lo.

they can provide electrification. The Nagthali Concerned Committee has also asked Rasuwagadhi HEP to renovate their gomba and there will be more demands in the future. Dalphedi, further north on the trail (see **Figure 5.4**) requested Rasuwagadhi HEP to continue the road from Thuman to their village, which would then connect to the main road at Timure, essentially making a ring road from where the Thuman road starts at the Chilime River confluence through Thuman and Dalphedi to Timure (see **Figure 5.4**).

This has the potential to entice Chinese tourists to trek the THT as their first tourism stop after they cross the border at Rasuwagadhi. All of the roads mentioned so far are on the west side of the Trishuli River outside of the Langtang National Park boundary (LNP) (see **Figure 5.4**). Since they are agricultural roads, they do not have to have an environmental impact assessment (EIA) making the process of building the roads easier.

If we look at local roads being built on the east side of the river within LNP boundaries the process has been much slower. A road to Thulo Syaphrubesi was started and stopped several times due to LNP regulations requiring an Environmental Impact Assessment (EIA) for roads. This pattern has repeated itself in Briddhim with similar results. Nima, a guesthouse owner in Briddhim explained to us the mixed blessings of roads, but with a keen eye to how the shifting political economy of hydro project-road mobilities is incorporated into local agency of future making projects. "When I was young, I did small salt trade business traveling to Kyirong and back with yaks. I also did work as a porter for trekking as well as trading in yaks and horses from Tibet."

His comments about this trade speaks to the cosmopolitism of local inhabitants that belies historical state narratives of Rasuwa being an 'isolated' and 'backward' periphery—a "zone of not yet" (Tsing 2005:29). "I would sell yaks from Kyirong in Upper Mustang, then buy horses there to bring back here to sell", he explained. A century ago with sparse road development in these areas, such a venture would have taken months. Now, "Roads help me get my yaks to Pokhara by truck and then I bring horses back in a truck. But since two years back [2012 when the road arrived] no one is buying horses anymore because of the new roads. No one is buying horses anymore—even in Upper Mustang no one is using them because they use motorcycles now". The logic makes sense as one former horse trader in Upper Mustang told us (Beazley and Lassoie 2017:70-71), "With a motorcycle you only have to put gas in it when you drive it. With a horse you have to feed it every day whether you ride it every day or not".

In Briddhim our interlocutor explains the local logic of the tourism road mobility matrix, "No problem with the road[76]—if yes OK, if no OK—but the road should not come on the trail so tourists will keep coming—sometimes tourists come here and stay for two or three days and then want to go back to Kathmandu—with the road they can reserve Tata Sumo[77] from here and go direct. One-time tourists came

[76] Virtually everyone interviewed wanted a road, they were aware that roads could have the potential to decrease some trekker tourism but were confident they could find ways around any negative impacts such as designing the road so that it was not on the trail or making a new trail. In fact, almost no one expressed any negative impacts of roads. This is understandable considering how many years most of the villagers have had to carry their supplies or hire porters to carry them to their village. I found similar results during my MS research in the Annapurna Conservation Area (see Beazley 2013).

[77] Tata Sumo is a popular 4x4 SUV in Nepal.

here and were supposed to go to Syaphrubesi next morning but decided to stay and I called vehicle to meet them at Lingling [a one-hour walk] so they could still get to Syaphrubesi on time. They stayed and I made 56,000 NRs. [~US$250] including cultural program—this may also help more when road comes to Briddhim".

As he continued, we find that his future plans do not stop with tourism. "Before everyone here had apple business, but disease came. I started again about three years ago and maybe others will start again also if I do well—right now I am investing 5 percent in apples—the road will help me. Apples here are better than Marpha apples." From similar conversations about hydro project-road mobilities in this district one gets the sense that "the closer one gets to life along the road, the more the road itself bleeds into the itineraries and paces" (Campbell 2012:491) of local actors embedded in socio-cultural and socioeconomic landscapes. But as noted before the process is uneven, discontinuous, and differentially distributed.

By all accounts Nima was one of the most successful entrepreneurs in Briddhim. Strikingly, a one-minute walk from his guesthouse is a completely different story. Pema is a young Tamang woman who grew up in Briddhim and was fortunate enough to meet a German trekker who sponsored her to attend school. Her parents are farmers and she explains, "Actually my dad and mom—they are so poor and old. They are uneducated and they don't have any income source. They have a little problem with fooding [sic] and lodging. So, I heartily request to help them how much as you can. It will be good for them. I think 2500 [NRs. ~ US$24.50] per month will be enough for them. So, I heartily request you to help them. Thank-you". The unevenness in Briddhim is obvious to the eye with a number of large well-built and freshly painted

guesthouses scattered among small older stone and timber houses.

Ironically, Briddhim was set up under the Tourism for Rural Poverty Alleviation Programme to bring tourism to the area with the homestay model (TRPAP 2007). The homestay model is designed to give trekkers the experience of staying a night in a local home, eating local food with the family. It is promoted as "a more authentic experience" requiring a minimal investment to the homeowner of a separate bedroom and outdoor toilet facilities for the guest. Many of the smaller houses in Briddhim display a homestay sign but experience since the program started proved that many trekkers preferred choosing the house they would stay in rather than following the more equitable plan of rotating trekkers through a queue system so the benefits would be more evenly distributed between homestays. Experience also showed that many trekkers preferred the greater comforts of a guesthouse and a menu of different food options as opposed to homestays (TRPAP 2007).

Briddhim residents with the financial and social capital to upgrade to a guesthouse are now taking all the business away from homestays. It appeared to us that none of the homestays had any business, a fact later confirmed after many interviews. And now Khaidi (see **Figure 5.4**) a one-hour walk above Timure has requested a road from Rasuwagdhi HEP, but also must deal with an EIA because it is inside the LNP boundary. Here we can see the uneven geopolitical landscape of development trajectories embedded in the heterogeneous cultural contested hydro project-road mobility-scapes of the Trishuli Valley. As Demenge (2011:4) has noted, "At the village level, road construction is a contentious matter that involves intense negotiations embedded within sociocultural practices; institutions and power relations;

and the use of different means such as persuasion, individual negotiations, trickery, and force".

Spatial Reorientation

Timure is the hub of the hydro project mobilities in the Trishuli Valley. Significant changes are emergent that reconfigure spatial and social relations making Timure a prime site for investment. This is what Reeves (2017:712), writing about infrastructure, suggests are "sites of popular imagination and anticipation, storing within them, in Larkin's (2013: 329) words, 'forms of desire and fantasy and can take on fetish-like aspects that sometimes can be wholly autonomous from their technical function'". Negotiating this highly complex material-social landscape is a daily-lived experience for the various diverse cultural and disparate scalar geopolitical actors who populate this borderland. Circulations of capital, resources, and social relations intertwine producing a hybrid space articulated by hydro project mobilities that both reflect and refract wider patterns of domestic and transnational circulations. In the following section, by focusing on the local lived landscapes, I hope to contribute to the wider discourse on globalization and development and the processual matrix that energizes and enlivens mobility-scapes.

Frontdoor-Backdoor Landscapes

As noted before Timure sits on one of the most historically important Trans-Himalayan trade routes. The old route ran through the middle of the village along a *mani* wall[78] with houses facing toward the trail. In essence the front doors of all the

[78] A *mani* wall is usually a stone wall built by Tibetan Buddhists along trails, which are adorned with *mani* stones. *Mani* stones have been engraved with Tibetan Buddhist prayers and iconography.

houses and by extension Timure itself opened onto the *mani* wall (**Figure 5.6**) and the trail (**Figure 5.7**).

In the course of daily activities, both mundane and spiritual, the trail and *mani* wall were the thoroughfares, "material place holders" (Widlok 2008) embedded in villagers' sense of place and identity. Layers of meaning inscribed materially on the *man*i stones and metaphorically in transnational footprints moored this mobility-scape as the frontdoor to the north-south borderland as well as the east-west material front doors of the houses. As Legat suggests (2008:47), "By footprints, then, is not necessarily meant the actual impressions of a track or trail made by the movement of human feet. The wayfarer's movement should be at once knowledgeable, task-oriented and attentive to relations with other beings in the environment through which it passes".

Figure 5.6 Mani wall in Timure (Photo by author 2014)

Figure 5.7 Timure before the arrival of the road with doors oriented to open on the trail (Photo: Buchung Tsering 2008)

Indeed, the *mani* wall and the trail on either side of it has, over hundreds of years and numerous wayfarers, come to define both the lived and imaginary history of a place called Timure. Mobility-scapes as processual entities are redefining the front door of Timure in a contested landscape vis-à-vis discursive traditional and modernist trajectories of local and transnational agency. In the following examples I show how this has played out in vernacular and materialist spaces circumscribed within coupled hydro project-road mobilities. I argue that this process is indicative and characteristic as well as emblematic of wider infrastructural trans-border mobility-scapes emerging in Nepal and globally.

The Syaphrubesi Rasuwagadhi Road (see **Figure 5.4**)

The Chinese financed road that arrived in 2012, connecting the existing road head at Syaphrubesi with Timure and the border at Rasuwagadhi, created various reconfigurations of the social landscape as well as reorientation of the material

landscape. The road was not aligned through the middle of Timure along the traditional trail but rather on the west side of the village closer to the Trishuli River. This in essence spatially reoriented the frontdoor-backdoor configuration of the village. As mentioned above all the houses in Timure faced the traditional trail with their front doors opening to the *mani* wall. A space with several huge boulders where the trail widens in approximately the center of 'old' Timure served (and still does for festivals) as the town square meeting place.

It is here that we observed the Mani Cherpe festival in 2015 (Murton, Lord, and Beazley 2016:20): "Commemorating the history of Tibetan–Nepali wars in the region as well as the transmission of Buddhism up the Kyirong–Rasuwa corridor through mythologized acts of tantric saints, the Mani Cherpe festival publicly re-enacts and visibly performs the powerful legacy of Tibetan history and culture in this Himalayan borderland of Nepal".

While the ritual space remains intact it has become a contested space in the community. The road has reoriented the major flow of people and traffic outside the village center to the 'backside' (west) of the village. New houses and refurbished guesthouse are all designed to open their front doors to the re-spatialized 'frontside' of the village —the road (**Figure 5.8**). This makes sense as most business is now oriented to the road. Interestingly, trekkers who arrive at the Timure Guesthouse enter from the road in a newly renovated front entrance only to leave by the back gate (formerly the front gate) to continue their trek along the historical trail, part of the THT.

Figure 5.8 Timure after the arrival of the road with doors oriented toward the new front-side—the road (Photo by author 2014)

With the road villagers can now order supplies by cell phone from the nearest market in Syaphrubesi that are delivered by truck (**Figure 5.9**). The daily truck drivers honk their horn on arrival and villagers emerge to collect their goods. Those who have houses facing the road have a short trip to bring their supplies back to their house. Not surprisingly, those who live in what is now the 'backside' of town have to walk further. The trail and *mani* wall (formerly frontside) have become a contested space embedded in discursive fairness and rights vernacular. Some backside villagers want the hydropower company to build a ring road from the main road behind the village and back to the main road at the end of town. This would essentially endanger the *mani* wall and stone paved trail as well as the village *gomba*, which sits on a hill just above the trail.

Figure 5.9 Timure women collected supplies they had ordered from the delivery truck (Photo by author 2014)

While the hydropower company has agreed to build the road, the villagers cannot reach a consensus. This friction is played out in concerned committee meetings and was acknowledged as a source of weakness in villagers' attempts "to become an agent of *bikas* rather than one of its targets" (Pigg 1992: 511).

In one meeting the concerned committee leader exclaimed, "the Chinese see our weaknesses—we are fighting among ourselves —Chinese company has found weakness of local people and are reluctant to respond to our demands". As Tsing (2005:246) has argued, "One of the best places to look for this kind of friction is in the formation of collaborative objects, which draw groups into common projects at the same time as they allow them to maintain separate agendas".

In Timure this palpable friction is layered in local political party affiliations, *thulo manche* hierarchies, gendered politics, and frontdoor versus backdoor landscapes imbricated in hydro project profit sharing and CSR mechanisms as well as borderland

transnational geopolitics. Hybrid spaces by their nature are contested terrain full of potentialities that energize diverse cultural actors trying to stake out their claim in a rapidly shifting and volatile "spaces of exception" and "zone[s] of awkward engagement" (Tsing 2005). This speaks to what Harvey and Knox (2012:521) call the "enchantments of infrastructure"[79] where "rhythms of hope and disappointment orchestrated the ways in which people told us about how the road shaped local histories and carried the traces of how those histories unfolded" (Harvey and Knox 2015:146). Indeed, development projects and their material manifestations are highly contested spaces in which various scalar institutions and actors negotiate political terrains and imaginary vistas of "hope and disappointment" (Harvey and Knox 2015:146).

Scales of Migration

In Timure as in most villages along the THT locals told us that in every household in their village at least one person had out migrated to work as wage laborers abroad in Gulf countries, Malaysia, or South Korea. One interlocutor in Thuman had recently returned from Iraq where he had served on security forces with the US military. He had returned using his resources from his deployment to open a guesthouse in Thuman. Domestic and transnational migration for wage employment has a long history in Nepal beginning with the service of Gurkha soldiers in the Indian and British regiments (Beazley 2013). This trend of out migration has intensified over several decades to the point where more than a quarter of Nepal's GDP is attributed to

[79] Here, Harvey and Knox are talking about how in Peru roads hold a particular promise of improvement in people's lives that is imagined and creates a desire, much like an enchantment.

remittances from abroad (WB 2017).

Hydro project mobilities in Rasuwa are changing patterns of out-migration with some out-migrants returning home and others deciding not to go, in this new 'frontier' hydropower development and trade-transport political economy. On the micro-scale in Timure local migration patterns are being reshuffled as in-migrants arrive seeking employment, administrative and security forces grow, and financial institutions arise needing employees. Nested within this complex shifting space are Nepalese hydro project laborers and managers and their Chinese counterparts. Housing is an ongoing issue with the hydro project still in the process of constructing its new headquarters and staff facilities. The field office for the Rasuwagadhi HEP, a house rented from a local Tamang woman, provides a good example of micro-migration practices, which I then follow with other examples.

Four young Tamang women work as administrative assistants in the office. They are all from Thuman and as designated project-affected people[80] were given preference for employment. Thuman can be reached by taking a vehicle from Timure to the Lingling Bridge, which crosses the river and then it is a one to two-hour uphill trek to reach Thuman (see **Figure 5.4**). It would be impractical for the women to go home to Thuman every night, so they live together in a local Tamang house during the week and go home on weekends. Several houses south, a local couple run a restaurant and rent rooms in the adjoining building to Chinese hydro project laborers.

The laborers will soon have to find other accommodation because the couple

[80] The village of Thuman is considered a hydro project-affected area by the Rasuwagadhi HEP and the people of Thuman in this context are (hydroelectric) project-affected people, or in Nepali*, ayojanale prabhabit manche* (see Lord 2014).

has decided to rent the building to a new bank that is coming to Timure. Chinese hydro project laborers have followed many micro-migration patterns in Timure, as we discovered from interviews with many locals who had rented rooms to them. They are a locally transient population, until their permanent housing is constructed. Timure housing is functionally transient also, as arising opportunities to rent housing for more lucrative (and perhaps more enduring) ventures such as new banks, buildings for customs and immigration administrations, and accommodations for hydro project managers, engineers, surveyors, and trade-transport entrepreneurs emerge. Migration patterns are constantly changing, adapting to the political economy of hybrid spaces in the hydro project mobility-scape. As Harvey and Knox have noted in Peru (2016:145), "it is local people who shape the life of the roads, just as these roads are material forces that in turn shape the lives of those who live along and around them" and attempt to manage those forces with "concepts and practices that political economy might recognize and reward" (Campbell 2014:248).

Another example of a regional migration pattern shaped by hydro project-road mobilities is the truck porters who come from other parts of Nepal to unload imported products from Chinese trucks and reload them on Nepalese trucks headed for Kathmandu. Binod moved to Timure a year ago. He had been doing a *yartsagunba* business in Jumla and Humla (north western districts). *Yartsagunba* is the Nepali term for *Ophiocordyceps sinensis*, a caterpillar fungus highly valued in Chinese medicine (Lo et al. 2013). With the profit he made in the *yartsagunba* business he was able to send his children to boarding school even though as he says, "I never attended school a day in my life". When prices dropped in the *yartsagunba* market he had to look for

other work. From an army friend stationed in Timure he learned about the new opportunities developing around hydropower, the border road and trade-transport. Through a series of local connections, he was able to buy land and establish himself as a local. He admits, "at first I was an outsider and it was difficult with different language and culture but now people are friendly".

As a landowner in Rasuwa and having developed the 'right' connections he was able to obtain a border citizen card.[81] When we met him he was working as a truck porter and whatever odd jobs he could find until he could raise the capital to work his way into the trade-transport sector. Only Rasuwa residents with border citizen cards are allowed to drive Nepalese trucks to Kyirong to pick up imported goods. He was 'working the system' of the hydro project-road converging trade-transport mobility-scapes to position himself as a winner in the future. This speaks to the ways migration mobilities converge with other mobilities to create hybrid spaces where local actors negotiate to create agency for future making imaginaries. With their children in boarding school, he and his wife were able to move to Rasuwa, become established as locals with border citizen cards and create their new life trajectories.

It was the hybrid space created by converging mobilities that opened the important opportunity for them to exercise their locally negotiated agency. This speaks to Campbell's (2014:242) query about roads and infrastructure in Amazonia, "Here, recently arrived migrants make their personal histories relevant in the present, which begs the question of how roadside residents are negotiating the varied, contradictory,

[81] A border citizen card (see *Chapter 4*) allows citizens living on either side of the Nepal-China boundary to travel up to 30 km across the border without a visa (see Shneiderman 2013).

yet ever-present models for the future of the region". In this sense, a study of heterogeneous scalar migration patterns in Timure embedded in converging mobility-scapes and their hybrid spaces fills in some of the gaps in knowledge of how migrants in Rasuwa negotiate these spaces. Interestingly, many have become entrepreneurs in the emerging hydro project-road mobility-scape real estate market. We will look at this dynamic and volatile landscape in more detail below.

Land Speculation

Local entrepreneurs with material, financial, and social capital negotiate in this transitioning migratory landscape, strategically positioning themselves to reap the rewards of *bikas* that has "long been promised but rarely realized, and despite being just 100 km from Kathmandu" (Murton, Lord, and Beazley 2016:10). The most marginalized and poor community, Ghattekhola a mere two kilometers from the border has the best land for the new hydro project housing construction.

One man in Timure, who owned land in Ghattekhola, sold a large parcel to the Rasuwagadhi HEP for four karod NRs. (~ US$394,000)[82]. It was a huge windfall for him—now he owns several trucks, which he uses for trade-transport as well as renting a dump truck to the hydro project. Yet just a one-minute walk from his property are several houses of Tibetan refugees who have neither Nepalese citizenship nor a land title and fear they will be forced from their land. In fact, the stress level was so high

[82] This may seem like a lot of money, but land prices are extremely inflated in Timure due to land acquisition by the Rasuwagadhi HEP and by the Nepalese government for Rasuwagadhi border facilities and the new dry port. The Nepalese government paid 4.8 karod Nepalese rupees (~ US$ 460,320) for the 51 ropanis of land required for the new dry port facility near Timure (Samiti 2016a). 1 ropani = 508.74 m^2 (5,476 ft^2).

when we visited Ghattekhola that a local lama[83] was doing a puja[84] for the village, according to those in attendance whom we interviewed.

The shifting, unpredictable, and highly uneven development trajectory is embedded in the cultural memory of Tibetan refugees and ethnic Tibetans who had migrated to the area before the 1950s. As the spiritual leader explained (Murton, Lord, and Beazley 2016), "Look at what they [the Chinese] did to Tibet. They brought food, and then infrastructure, and then took it over. And now we see that happening here, too. We are worried about what will come next". But it is not just the Tibetans who are under stress. A new dry port is needed for the border trade and local land acquisition is another contested mobility-scape.

The plan calls for 250 ropanis[85] of land of which five hectares will come from LNP, 110 ropanis from various government agencies, and the remaining 58 ropanis from locals. The 58 ropanis is spread among 63 landowners. Locals, unhappy with terms of compensation for their land, staged a strike blocking the road and stranding 500 trucks loaded with apples from China headed for Kathmandu for an annual festival. In a newspaper interview (Thapa 2016) the local organizer of the protest questioned, "Where do we go after they acquire all our land? Turning our land into a dry port will leave us homeless". This is underscored by the government's acquisition of all the land along a one-kilometer stretch from the Rasuwagadhi border south. Rumors of land grabs, unscrupulous land profiteering, and government malfeasance

[83] Lama is a Tibetan and Tamang term for high priest.
[84] Puja is a Nepali term for a religious ceremony.
[85] 1 ropani = 508.74 m^2 (5,476 ft^2)

are further fueled by a government announcement freezing all land sales along the Galchi-Rasuwagdhi road in anticipation of the road widening project that will upgrade the whole section to international highway status.

Many villagers along this stretch of road are worried about having their houses or businesses destroyed when 15 meters on either side will be taken to widen the road. This tension is further exacerbated by the Nepal army who has been given the task of opening the new stretch of the road from Hakubesi to Syaphrubesi (see **Figure 5.4**), which will involve more land acquisition, blasting, and construction. The area along and below this stretch has already seen numerous landslides from hydro project construction and the 2015 earthquake. Locals are learning how roads drastically change mobility-scapes in the present. In a Kathmandu Post article (Sthapit 2011), a Timure villager expressed the concerns felt by many in the area, "All the land is being bought up by people from Trisuli and further south. Soon, the whole village will be owned by them, and we'll have to resort to collecting firewood and fodder for money … The poor will just get poorer".

While hydro project-road mobilities bring many benefits to local populations, they are not without drawbacks. CSR, shares, or other community development projects cannot remedy stress as an outcome. *Bikas* often comes at a price in terms of unforeseen or unintended consequences (Beazley 2013). Whether targets of *bikas* or agents of it, often local actors at all levels are largely unaware of its long-term impacts. As Campbell (2014:240) knowingly cautions, "In the erratic and often murky context of the frontier's expansiveness, strategies of accumulation are unpredictable, and the means of accounting for property and resourcefulness are inchoate".

Gifts of Development

To fully understand the complex terrain of hydro project mobilities in this borderland necessitates a consideration of transnational geopolitical positionings vis-á-vis foreign direct investment (FDI) and aid. Mobilities—being inherently relational, relative, and processual—rub up against other mobilities influencing each other in "fractal and scalar" (Murton 2017) propagations across multiple landscapes both national and transnational.

The Rasuwa borderland mobility-scape is embedded in circulations of transnational flows of hydropower development contracts, capital accumulation, "gifts of development" (Yeh 2013) and humanitarian aid after the 2015 earthquake (see *Chapter 6*). As Murton, Lord, and Beazley (2016:2) note, "Reflecting a larger pattern of Chinese investment in Nepal –referred to as a "handshake across the Himalayas" [Pant 2013] – Rasuwa District hosts an array of complementary infrastructure projects being developed in partnership with Chinese Government and private sector actors". Yeh (2013) analyzed China's uneven development trajectory in Tibet (Tibet Autonomous Region) through power relations between the state and its subjects whereby the state packages its reification of control and legibility in the guise of generosity (Yeh 2013:267):

> The grammar of the gift posits an intersubjective relationship between the state as giver and its citizens as recipients; it thus works to produce the effect of the state as a reified, unitary actor with an ontological presence. This reification of the state calls into being the recognition of a relationship of belonging and thus works to consolidate state space as territory.

On the national scale China has now surpassed India in both FDI and humanitarian aid in Nepal (Xinhua 2014). China, largely, has chosen to invest in

hydropower and other infrastructure projects such as the Ring Road expansion in Kathmandu and the new international airport in Pokhara among others. Ironically, given China's struggle to assimilate Tibet into the motherland Beijing has proposed a US$3 billion project to make Lumbini, the birthplace of Gautam Buddha in southern Nepal, "a premier place of pilgrimage" (Aljazeera 2011). It will have preferential treatment as a special development zone with investment incentives and tax breaks, bringing the water, communication technology, and electrification that it currently is lacking. Other infrastructure planned includes highways, a Buddhist university, convention center, hotels, temples, an airport (Gautam Buddha Airport), and eventually the Trans- Himalayan train from Rasuwagadhi. Needless to say, Delhi is very alarmed as Lumbini is barely 30 km from the Indian border (Aljazeera 2011).

The Trans-Himalayan train is an extension of the Qinghai-Tibet Railway, which has already reached Shigatse and is currently moving west scheduled to reach Kyirong (Tibetan border town 25 km from Rasuwagadhi) by 2020. In November 2017, a Chinese railway technical team conducted a survey of the route from Kyirong to Rasuwagadhi-Kathmandu-Pokhara-Lumbini deeming it technically feasible (Mishra 2017). This is underscored by the new 20-year plan by Nepal's Railway Department[86] to build 4000 km of tracks both north-south and east-west (**Figure 5.10**) (Bhushal 2017). Now almost all Chinese-financed transport infrastructure projects in Nepal are discursively couched by Beijing as part of its Belt and Road Initiative (BRI [a.k.a. One Belt One Road]) economic plan to connect Asian, European, and African economies.

[86] http://www.dorw.gov.np/content.php?id=4

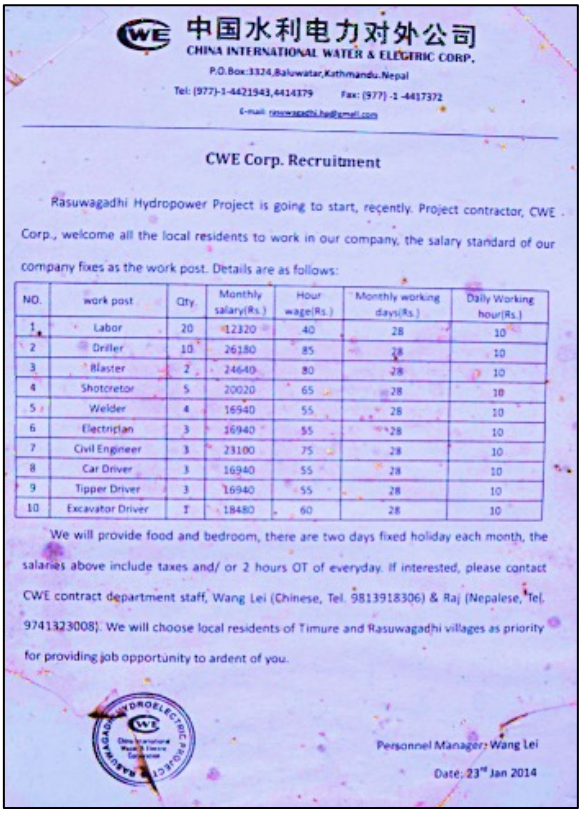
Whether it is the Syaphrubesi-Rasuwagadhi road and its route south to India, the Trans-Himalayan railway, or other new infrastructure investments in Nepal it all 'neatly' fits into the BRI rubric.

Figure 5.10 Map of future railway expansion for Nepal (Source: *chinadialogue*)

Nepal as an early signatory to the BRI in 2014 (Adhikari 2015) has been eager to stake future making imaginaries as a "vibrant bridge" between India and China as a way to bring *bikas* to the nation. But the turn toward Beijing came fully into focus in 2015 when violence on the southern border blocked fuel and other supplies from India for nearly five months. Historically, India has had a monopoly on fuel supplies to Nepal, but with increasing interest in Beijing's overtures since the end of the civil war Kathmandu sought help from Beijing for the fuel crisis. China then 'gifted' petrol to Nepal, which came overland to Rasuwagadhi and on to Kathmandu (Beazley and Lassoie 2017).

In Rasuwa, the hydro project mobility has been enlivened by the gifts of

development through the financing of roads to access the Trishuli 3A and 3B HEPs as well as the Syaphrubesi-Rasuwagadhi road to the border and subsequent investment in the Rasuwagadhi HEP. Local labor employment by the Chinese contractor at the Rasuwagadhi HEP is another preferential gift to project-affected people (**Figure 5.11**).



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CWE Corp. Recruitment

Rasuwagadhi Hydropower Project is going to start, recently. Project contractor, CWE Corp., welcome all the local residents to work in our company, the salary standard of our company fixes as the work post. Details are as follows:

NO.	work post	Qty.	Monthly salary(Rs.)	Hour wage(Rs.)	Monthly working days(Rs.)	Daily Working hour(Rs.)
1	Labor	20	12320	40	28	10
2	Driller	10	26180	85	28	10
3	Blaster	2	24640	80	28	10
4	Shotcretor	5	20020	65	28	10
5	Welder	4	16940	55	28	10
6	Electrician	3	16940	55	28	10
7	Civil Engineer	3	23100	75	28	10
8	Car Driver	3	16940	55	28	10
9	Tipper Driver	3	16940	55	28	10
10	Excavator Driver	1	18480	60	28	10

We will provide food and bedroom, there are two days fixed holiday each month, the salaries above include taxes and/ or 2 hours OT of everyday. If interested, please contact CWE contract department staff, Wang Lei (Chinese, Tel. 9813918306) & Raj (Nepalese, Tel. 9741323008). We will choose local residents of Timure and Rasuwagadhi villages as priority for providing job opportunity to ardent of you.

Personnel Manager: Wang Lei
Date: 23rd Jan 2014

Figure 5.11 China Water and Electric (CWE) employment opportunity notice in Timure (Photo by author 2014)

Further gifts to borderland inhabitants have come in the form of tin roofing, financial donations and laptops for school upgrading, Tibetan tea, and bags of salt. Interestingly, while the tea-salt gift may seem random to outsiders, it fits nicely within the predominant Tibetan landscape of the borderland where Tibetan tea (made of tea, salt, and butter) is a social ritual and a dietary necessity in cold, high altitude environs. More than 50 years of trying to integrate Tibet into the 'motherland' has brought home the importance of cultural traditions as 'gifts' of generosity from the state (soft

diplomacy)—arguably a more efficacious (while at the same time blatantly obvious to its recipients) form of state reification compared to earlier experiments in outright coercion. As Kapoor (2008:79) has argued about the benevolent aid gift—"its construction as gift is belied by its (equally constructed) practice as grift". In other words, the so-called gift may be hiding ulterior motives.

While interviewing locals in Rasuwa about the question of Chinese gifts to Nepal, answers were mixed with some saying it was good because Nepal is a small poor country and others saying it was bad and that Nepal should be able to stand on its own. A third sentiment was that China should not be trusted —that they were only helping so that one day they can take over Nepal. As one local put it succinctly,

> It is absolutely wrong because we should be able to stand on our own—we should not survive in other's mercy. The Chinese are trying to project a good face to people here and influence—some Timure dwellers think because our nature is poor they will try to influence us.

This highlights an almost universal feeling in Nepal that it is a small poor nation precariously situated in between two giant nations that could dominate them if they chose to and that the secret to maintaining independence is to play one country off the other.[87] Nepal has been historically adept at negotiating these spaces of reciprocity to benefit Nepal while maintaining national sovereignty.

The most recent iteration of this tradition is the Nepalese government's acknowledgement of the one China policy in exchange for Chinese gifts of development—in Rasuwa, energy security for Nepal is traded for national security in

[87] Prithvi Narayan Shah, consolidator and first king of Nepal, invoked this concept in the late 18th Century in a proverb that is still used today, describing his country as a "'yam between two boulders'" (Shneiderman 2013:27).

Tibet.[88] For the lived experiences of Tibetans residing in Nepal this has meant a clamp down on "Free Tibet" demonstrations, increased surveillance and security forces in Tibetan areas of Nepal, and repatriation of Tibetans 'illegally' entering Nepal in northern trans-border mobility-scapes (Human Rights Watch 2014). In 2010, China gifted Nepal a $10 billion grant to buy riot gear for their police force, with the stipulation that they buy Chinese riot gear (**Figure 5.12**) (Reeves 2012).

Figure 5.12 Nepal police security forces in riot gear at the Boudha stupa (Source: Human Rights Watch 2014)

In Boudha, the largest Tibetan community in Kathmandu, police security forces are deployed around the main stupa during national holidays, Tibetan New Year, and the Dalai Lama's birthday to enforce the prohibition on Tibetan protests and to discourage public gatherings for Tibetan religious and community celebrations. Surveillance cameras have been installed in and around Boudha and locals interviewed expressed concerns about the tightened security with a growing perception that

[88] In other words, Nepal has accepted Chinese aid, in this case hydro project construction contracts, in exchange for guarantees that Nepal will limit free Tibet demonstrations in Nepal.

Boudha was starting to feel like Lhasa.

This highlights the lived mobility-scapes of "gifts of development" and "gift as grift" that Tibetan populations must negotiate in Nepal, including Rasuwa. As noted by Murton, Lord and Beazley (2016:12) "Chinese interventions in Nepal, particularly those ostensibly geared toward infrastructure development, have become more closely tied to Chinese concerns with state security and control over Tibetan exile populations".

In March 2016, Nepalese Prime Minister Oli made a state visit to Beijing to discuss matters of mutual concern including energy security, transportation systems expansion, and national security. Following the meetings during a press briefing the *Joint Statement between the People's Republic of China and Nepal* (Kathmandu Post 2016) was issued. Article three of the statement expresses in no uncertain terms China's expectations of Nepal regarding Chinese sovereignty:

> . The two sides reiterated their firm commitment to respect each other's independence, sovereignty and territorial integrity, respect and accommodate each other's concerns and core interests. The Nepalese side reiterated its commitment to one China Policy. It firmly supports the efforts made by the Chinese side to uphold state sovereignty, national unity and territorial integrity, and does not allow any forces to use Nepalese territory for any anti-China or separatist activities. The Chinese side firmly supports and respects Nepal's own choice of social system and development path, and the efforts made by Nepalese side in upholding its sovereignty, independence, territorial integrity, national unity and stability. L SEP

During Oli's visit ten memoranda of understanding (MOU) were signed directly linking Nepal-China connectivity through Chinese investment in infrastructure including:

transit transport through China, river bridge in Humla, Chinese assistance for

> exploration of oil and gas resources, strengthening of intellectual property system, feasibility study of China-Nepal Free Trade Agreement, and MOU between China Banking Regulatory Commission and Nepal Rastra Bank,… the international Airport in Pokhara, feasibility study on Araniko and Syaphrubesi-Rasuwagadhi highways, construction of cross border railways and railway network in Nepal, Chinese investment in key areas including infrastructure, cross-border economic cooperation zones, and three billion RMB grant assistance from 2016 to 2018 to support post disaster-reconstruction of Nepal (Dahal 2016).

Specific programs to upgrade Nepal border security have come from China in both financial packages and joint forces training in China (Human Rights Watch 2014).

Bringing our focus back to the local level, this geopolitical shift away from India and toward China was unintentionally evident on the face of the new customs and immigrant office at the Rasuwagadhi border. The building was rented from a local with a brand-new customs and immigration sign hung over the front entrance. In anticipation of the upcoming official opening ceremony someone had placed a piece of a cardboard box over the sign so it would be a surprise at the unveiling. Stamped on the cardboard clearly visible were the words "Made In China" (**Figure 5.13**). The made in China brand is apropos as some of the new small stores that have popped up around Timure are indeed largely made in China. The gift of tin roofing from China has been used not only for roofing but as siding on structures also **(Figure 5.14**). Apart from the wood framing such buildings are made for free—a gift from China.

Conclusion

In this chapter I have shown how local actors have negotiated the highly complex geopolitical and socioeconomic landscape of hydro project mobilities that are embedded with converging local landscapes of spatial reorientation, scales of

migration, land speculation, and gifts of development.[89] They have found agency as

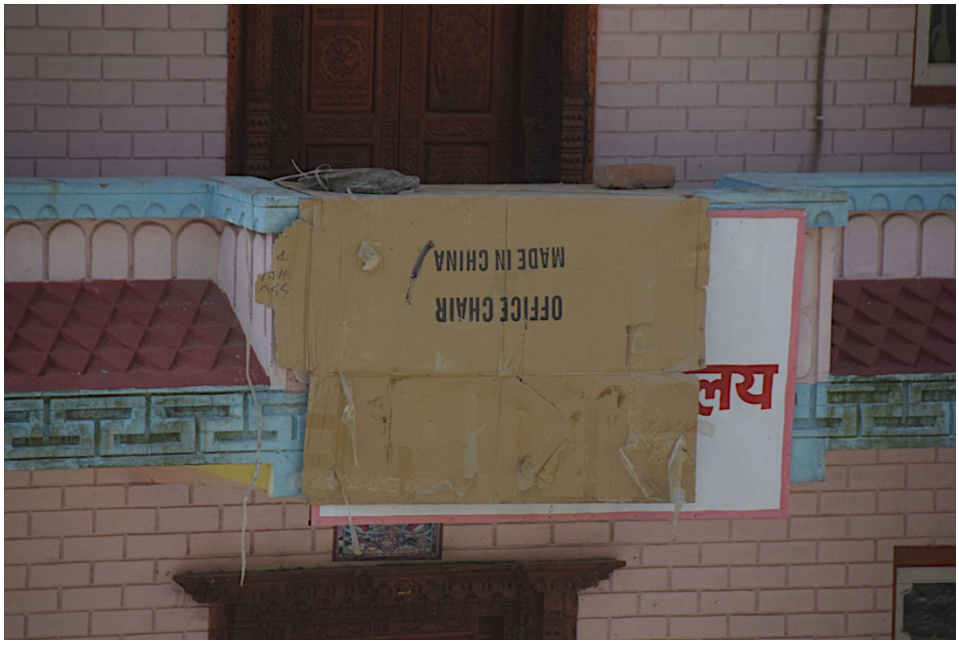

Figure 5.13 New sign on the Rasuwagadhi customs and immigration office- "Made In China" (Photo by author 2014)

Figure 5.14 A local store constructed with 'gifts' of Chinese tin roofing (Photo by author 2015)

[89] Other authors have commented on a similar phenomenon in Tibet (Yeh 2013), India (Kapoor 2008), Indonesia (Tsing 2005), and others.

project-affected people to bring *bikas* to their homeland, a homeland that historically was viewed by Kathmandu as a "zone of not yet" (Tsing 2005), an isolated 'backward' frontier that had little importance as a development trajectory and was used mainly for extractive purposes of corvée labor that served the monarchy. As the modernist development paradigm entered Nepal after the fall of the Rana regime, their development hopes were still largely ignored until the end of the civil war (1996-2006) with the push for Nepal to become a hydropower nation, and the shifting geopolitical landscape along its northern border. Increasing Chinese investment in hydropower, transport infrastructure, and other Chinese "gifts of development" in Nepal has influenced a shift in Kathmandu's orientation away from a historical focus on Delhi to refocus on Beijing with hopes of bringing *bikas* to Nepal as a "vibrant bridge" within the Belt and Road Initiative.

In Rasuwa, the coupled hydro project-road mobility, converging with the trade-transport mobility, created a hybrid space rich with opportunities and newly emerging project-affected peoples' agency mobility-scapes where the hydro projects have become a more enduring form of governmentality than the state. Individual experiences of this hybrid space are highly uneven resulting in contested landscapes embedded in heterogeneous cultural traditions and local geopolitical negotiations. Issues of land titles and citizenship circulate among political economies of land speculation, trade-transport mobilities, and hydro project benefit sharing mechanism producing winners and losers. The winners have been able to carve out a project-affected peoples' political economy which is bringing *bikas* to their villages in the form of hydro project-built roads, electrification, better health and education facilities,

drinking water, small business workshops, and adult education. Within this new political economy of local agency there is still contested terrain as concerned committees negotiate their internal local politics concerning what the present brings and what they hope for in their future imaginaries.

State-making "regimes of territorialization" (Wilson 2004) emerge in land grabs, road widening projects, dry port development, and hydro project expansion. Circulating within this landscape are numerous scalar migration mobility-scapes that reflect historical as well as new micro-migration patterns rooted in hydro project-road and trade-transport mobilities and their hybrid spaces, where negotiated local real estate markets are embedded in a larger project-affected persons' emerging political economy. This reflects a highly dynamic and volatile border landscape where diverse actors 'work the system' to create new forms of agency bringing the *bikas* they were historically denied into their homeland. "The politics and poetics of infrastructure" (Larkin 2103) are laid bare in the daily-lived mobility-scape experiences of the 'messy' conglomeration of agents striving after the "enchantments of infrastructure" (Harvey and Knox 2012) within contested state making "regimes of territorialization" (Wilson 2004) in "states of exception" (Ong 2006) along an emerging former "zone of not yet" (Tsing 2005) borderland. The shift of geopolitical gravity away from Delhi and toward Beijing is mirrored in variegated local vernaculars (both public and local party affiliation) treading a line between hope and distrust that is refracted in the wider discursive geopolitical landscapes of Delhi, Kathmandu, and Beijing.

I have argued that the mobilities framework that I employ brings legibility to this necessarily complex and convoluted process providing purchase to analyze the

frictions inherent in state making development trajectories and in their absence. In using local voices and visual ethnography I have untangled the 'messy' spaces of modernist development trajectories in Nepal allowing local actors to elucidate the daily-lived experience of negotiating volatile and disparate scalar highly contested mobility-scapes. Looking through the lens of hydro project mobilities we find a highly complex landscape embedded with transnational diverse cultural actors moving through state making regimes of territorialization that have become spaces of local agency due to the dysfunctional absence of the state. In the next chapter this trajectory will be explored in more detail within disaster mobilities.

CHAPTER 6

DISASTER MOBILITIES

This chapter is based on a published article in *Himalaya's* Special Issue on 2015 Earthquakes and Aftermath.[90] It has been expanded and refocused within my mobilities framework developed in *Chapter 2*. I start with an opening vignette at the Bir Trauma Center in Katmandu.

Sudan Gurung arrived by scooter at the Bir National Trauma Center on April 25, 2015, carrying a man with an injured leg. The entrance to the Trauma Center was littered with injured people waiting for help. In the wake of the 7.8 magnitude earthquake that occurred earlier that day, the already overloaded healthcare system was itself in critical condition (Pandey 2016; HPS 2015; Sifferlin 2015; Thomas 2015). While Sudan was at the Trauma Center, he witnessed a young woman die, clutched in her mother's arms. His description of this moment on social media is a moment of personal transformation. He recognizes the vital role he can play to help his fellow citizens.

> That was the moment everything changed for me. I knew this was where I was needed. Everyone was dehydrated. Doctors don't have time to eat or drink; they are saviors but they needed saving. I went to find water and eventually found one shop open. I did 22 journeys on my scooter taking water to the hospital. In the evening I brought noodles. There was one boy, about five years old, in a really bad state. His mother had already lost one child and I could feel her pain. I said, 'Don't worry, I am here for you.' It was the best I could do. I called the doctor and said, 'You've got to save this child.' Thankfully he survived. I posted on Facebook, 'I am here distributing water and food... but I can't do it alone.' The post was shared by 985 people and got 1,080 likes. The next day I had 30 to 40 volunteers, and the day after that 300 volunteers. In

[90] Beazley, R. (2017). Himalayan trauma: Administrative thrombosis and citizens' response. *Himalaya - The Journal of the Association for Nepal and Himalayan Studies.* Available from: https://himalayajournal.org/mainnews/special-issue-on-2015-earthquakes-aftermath/

> two weeks, we had 1,200. I assigned two volunteers to one patient, so they received 24-hour service; they'd fan them, wash them, feed them. One team looked after the medical staff, and another was assigned to clean the hospital twice a day, inside out. I didn't rest for the first two days and nights and on the third night I collapsed. The doctors told me I had to rest. My feet were swollen from excessive walking, but I couldn't stop. (Gurung quoted in Carpenter 2015)

Sudan decided to call the rescue and relief effort he started *I 2 We*. I would come to know it well.

Introduction

In this chapter, I use excerpts from social media postings and traditional media to highlight how various citizen and volunteer responses to the 2015 earthquake helped fill in the gaps created by institutional dysfunction and articulating disaster mobilities. Further, I show how these two types of media (social and traditional), embedded in virtual mobility technologies, played a critical role in facilitating communication between grassroots aid initiatives and earthquake affected people and their families and friends, not only in Kathmandu, but also in neglected mountainous areas as well. I use a personal, reflexive approach to help situate the distinct experiences of earthquake affected people including trauma patients, persons with disabilities (PwD), and volunteer aid workers as they attempt to negotiate the dynamic, volatile, and contested landscape of disaster mobilities.

I argue that virtual mobility played a crucial role in disaster mobilities facilitating communication between disparate actors that created a virtual network of information that created multiple disaster mobility pathways. These pathways are highlighted by the lived experiences of earthquake injured and affected people, grassroots self-organized citizens' volunteer initiatives, and PwD recuperating from

post-earthquake trauma.

Both affected persons and responders use this virtual mobility-scape to fashion mobility maps (mental and material) co-constituting mobility pathways around occlusions, ruptures, fractures, cracks, holes, fissures, and the messy landscape of material natural disasters and the administrative thrombosis of dysfunctional state disaster response. I further suggest that as a product of these efforts, citizens co-constitute a socio-political governance mechanism filling the lacuna left by the state.

Focusing on the local lived experiences of volunteers at the Bir Trauma Center (including myself) I expand my analysis out to areas of neglect outside the Kathmandu Valley to show how virtual mobility creates hybrid spaces in disaster mobilities that enliven and energize diverse mobile actors across multi-scalar disaster landscapes. Using multiple mobile methods and visual ethnography I moor my overarching argument that the mobilities framework I leverage brings legibility to necessarily 'messy', complex, and convoluted processes providing purchase to analyze, in this chapter, the strengths and deficiencies in the states' disaster response preparedness and response capacity.

I begin with a discussion of virtual mobility within disaster and post disaster landscapes to contextualize and foreground the chapter. Then I show how moorings are also mobile, simulating an illusion of [im]mobility while in the processual trajectory of connecting material and virtual mobility-scapes over multiple scales embedded with various actors. Moving from urban to rural landscapes I articulate how disaster mobilities encounter "zone[s] of awkward engagement" embedded in "zones of not yet" (Tsing 2005) reconfiguring center-periphery trajectories through virtual

mobility enlivened, converging local and extra local actor agency.

I finish moving from the rural back to the urban creating a 'map' of the processual trajectory of disaster mobilities circulating with foreign and domestic flows of humanitarian aid capital (social and economic), earthquake affected people, people with disabilities, mental health and emotional support networks, social and traditional media, government dysfunction and malfeasance, and geopolitical tensions. I further demonstrate how heterogeneous actors' experiences of disaster mobilities are nested in asymmetrical outcomes and benefits of the impugned disaster response terrain. In so doing, I aspire to contribute to the ongoing research and discourse of natural disaster aid and response.

While acknowledging Sheller's (2012) "islanding effect", which I explain in more detail later in the context section, I choose to focus on experiences of co-constituted mobility-scapes that circumvented the 'island'. In doing so, I help fill the lacuna Linder (2017:223) acknowledges, writing that "Nepal remains underrepresented in this [mobilities] literature". In this chapter, I focus on lived experiences of re-mobilized local actors embedded in the virtual mobility terrain of Nepalese citizens' self-organizing grassroots responders while at the same time recognizing the asymmetry in the overarching landscape—the "islanding effect" is also present.

Virtual Mobility Within Disaster and Post Disaster Landscapes

While this section serves to ground the following discussion within the literature of virtual mobility in disaster preparedness and response it is neither exhaustive nor comprehensive. I seek here to offer three case studies (Haiti, Japan, and

Nepal) that are emblematic of the wider literature and germane to the specifics of this chapter.

Definition

Here I follow Adey (2006:77) who defines virtual mobility as "how physical movement (is) related to communication systems". Hannam et al. (2006:4) further elaborate:

> In addition to physical travel, both the Internet and mobile telephony are allowing new styles of communicating on the move...new forms of co-ordination of people, meetings and events...and a re-arrangement of the relations between domestic and public space...There is increasing convergence between transport and communication, 'mobilizing' the requirements and characteristics of co-presence into a new kind of mobility nexus.`

Context

In the contemporary global setting, virtual mobility has increasingly emerged as an enlivening and energizing hybrid space powerfully synergizing preparation and responses in disaster and post disaster landscapes (Linder 2017; Hsu et al. 2016; Reynaud and Guérin-Lassous 2016; Jung and Moro 2014; Büscher, Liegl, and Thomas 2013; Sheller 2012; Shigyou 2012; Slater, Nishimura, and Kindstrand 2012; Hughes and Palen 2009; Troy et al. 2007; Kodrich and Laituri 2005; Kim et al. 2004). This is underscored by the highly asymmetrical outcomes inherent because some actors have access and connection to virtual mobility technologies, and some do not. Here, issues of marginality, isolation, social and economic capital, infrastructural configurations, cultural politics, and geopolitical landscapes emerge (Büscher, Liegl, and Thomas 2013) producing what Sheller (2012), writing about the 2010 Haiti earthquake, calls the "islanding effect". She (Sheller 2012:187) explains this effect,

"in which mobility regimes in post-disaster situations bring highly motile foreign responders and assistance to some of the affected population, while holding the 'internally displaced' in place, in an ongoing process of marginalization, serial displacement, and containment–as if they were marooned on an island". Here, Sheller (2012) brings up the ethics of separate mobilities. A brief survey of the disaster mobilities (in Haiti, Japan, and Nepal) literature most salient for this chapter is presented below.

Haiti

There is no lack of literature on the use of virtual mobility technologies during and after the Haiti 2010 earthquake (Jamal 2017; Kaussen 2015; Simon, Goldberg, and Adinia 2015; Munro 2013; Dugdale; Van de Walle, and Koeppinghoff 2012; Sheller 2012; UN 2011; Yates and Paquette 2011; Meier and Monro 2010; Smith 2010). Interestingly, the 2010 Haiti earthquake is cited as one the first times that virtual mobility technologies were used in a disaster response. The UN (2011:11) publication *The Future of Public Information Sharing in Humanitarian Relief* states:

> On the timeline of the Internet's evolution, the 2010 Haiti earthquake response will be remembered as the moment when the level of access to mobile and online communication enabled a kind of collective intelligence to emerge—when thousands of citizens around the world collaborated in volunteer and technical communities (V&TCs) to help make sense of a large-scale calamity and give voice to an affected population.

The fact remains that when responders arrived in Haiti, almost all of the information they sought (street level maps, location of hospitals, contacts for NGOs, aid routing, etc.) had either been destroyed when buildings collapsed or was impossible to access. In essence, they had to start from scratch by "leveraging social

networking and mobile phone-based tools to aggregate, analyze and plot data about urgent humanitarian needs" (UN 2011:18). The UN report goes on to show, despite the problem of having too much data collected that was poorly organized and under used, the great potential virtual reality technologies hold for preparation and response to natural disasters.

The report identifies four reasons why the system was overloaded with too much data that were underutilized. First, field staff was overwhelmed with data that they had neither the tools nor resources to use effectively. Second, the absence of a structured streamlined mechanism for channeling the different flows of information contributed to the information overload for field staff. Third, tens of thousands of Haitians used their cellular phones to directly communicate their needs, creating an expectation of response that was impossible to match, but continued to grow as some response did filter in. Lastly, expectations were high throughout the responder hierarchy that a composite picture of response across all agencies could be generated, "but that was unrealistic given the humanitarian system's paucity of technical resources and staff" (UN 2011:19).

Despite the information-overload, one area where virtual technologies proved crucial was in disaster mapping. Both OpenStreetMap[91] and CrisisMappers[92] were instrumental in collecting data and coordinating imagery to produce both street maps and various types of disaster response maps. Other crowd-sourcing sites including

[91] https://www.openstreetmap.org
[92] http://crisismappers.net/

CrisisCamps/CrisisCommons[93], 4636 Alliance[94], and Ushahidi[95] contributed to the Haiti disaster response.

With cell towers in Haiti still mostly operable after the earthquake, SMS messaging played a key role in circulating information, but as Meir and Munro (2010:92) report it took a team of dedicated people including "ActiveXperts, Energy for Opportunity, FrontLineSMS:Medic, Sahana, Ushahidi, and Votident" to make an "SMS-based emergency reporting and response system". One of the major problems was language, most of the victims spoke Haitian creole while responders spoke English. A crowd-sourced volunteer group was organized to translate the creole messages into English that were then sent to geolocated responders. Once the system was up and running it took only ten minutes from the time the creole message arrived to get the English translation sent to responders.

Language translation is a key element of using virtual mobility technologies in disaster, which is discussed in the context of Nepal below. In the final analysis, as Sheller (2012) noted previously, there are asymmetries within virtual mobility disaster systems and it is impossible to not have some kind of "islanding effect". Nonetheless, as cell phones become less expensive and coverage better the "islanding effect" will decrease in some areas.

Japan

There is a vast literary trove of the use of virtual mobility during the magnitude

[93] https://crisiscommons.org/
[94] http://www.mission4636.org/
[95] https://www.ushahidi.com/

9.0 Japan 2011 earthquake and ensuing tsunami (Jung and Moro 2014; Jung and Moro 2012; Shigyou 2012; Slater et al. 2012; World Bank 2012; Brenhouse 2011; IMJ Mobile 2011; IT Media 2011; JCAST News 2011; Livedoor News 2011; Mobile Marketing Data Labo 2011; *Sankei Biz* 2011; Yoshitsugu 2011; *Zaikei Shimbun* 2011).

Jung and Moro (2014) have explained the multi-functionality of social media identifying five functionalities. These include micro (inter-social relations), meso (local institutions and media), macro (mass media), cross-sharing (information pooling), and direct channels between multi-level agents. In the vacuum created by insufficient and unreliable information provided by the government and conflicting foreign media reports, the number of Twitter messages doubled immediately after the earthquake, and in the first week there was a 30 percent increase in the number of Japanese Twitter users.

Numerous embassies set up Twitter accounts to message their citizens about vital information as did many media outlets. Cell phones became an important tool in gaining this information as the authors explain (Jung and Moro 2014:136): "Millions of commuters in Tokyo who could not get home due to the suspension of the rail system on the day of the earthquake had the option to access Twitter via smart phones to seek useful information about train delays." In addition to Twitter, citizens gathered information on Facebook, YouTube, Flickr, Nico Nico Douga[96], and Ustream[97] as well. Peary, Shaw, and Takeuchi (2012) report similar results in their study of social media

[96] http://utaite.wikia.com/wiki/Nico_Nico_Douga
[97] http://www.ustream.tv/

after the earthquake, pointing out that during disasters often social media is the only functioning communication system. Cell phones in particular became very important not only for personal communication between friends and loved ones but also to access Twitter feeds. They explain how Twitter published a website that mobile phone users could access helping those who did not have smart phones with the Twitter app to still be able read Twitter feeds. Mixi, a Japanese online social network, provided a blog page specifically for information related to the disaster as well as links to Google Person Finder. A World Bank (2012) report on the disaster credits FM radio for broadcasting important information when emergency communication system broke down. This proved very useful to older Japanese who did not have Internet access. Social media was also critical in search and rescue operations and in fundraising.

Finally, Yoshitsugu (2011:para. 3) states, "It can be said that in the wake of the quake social media took a huge step for gaining a social status as a communication tool".

Most of the literature also concludes that while virtual mobility technologies were vital in many facets of the earthquake response there were also problems associated with it including many of the information overloads and streamlining challenges reported in Haiti above. Misinformation in many instances confounded the problems rather solving them.

Nepal

Since April 2015, many people have written about the vital role virtual mobility technologies played in earthquake relief efforts (see Busso et al. 2015; Carpenter 2015; Schorr and Warner 2015). The use of virtual mobility technologies—

social media, smartphones, radios, and open source mapping—was instrumental in getting the word out, recruiting volunteers, raising funds, networking, and organizing logistics.

The day of the earthquake Mark Zuckerberg, CEO of Facebook, activated Safety Check on Facebook—a way by which individuals in Nepal could notify friends and family that they were safe. This mirrors Peary, Shaw, and Takeuchi's (2012) report of the value of Google Person Finder during the Japanese disaster. Within hours, a team of volunteers led by Mark Turin (University of British Columbia) translated Safety Check into Nepali, making the function many times more effective in Nepal. As noted previously during the Haiti earthquake language translation can facilitate the use and efficacy of virtual mobility technologies in disaster landscapes (Meir and Monroe 2012). More than seven million people were marked safe and more than 150 million friends received notifications informing them that their friends were safe during this period (Thapa 2016:567; Wikipedia 2016; Zuckerberg 2015).

Many volunteers gave friends and family real time updates on Facebook, Twitter, SMS, and phone calls from the Trauma Center, creating a virtual participant-observer experience and prompting support and donations. As these virtual mobility pathways spread, they began intersecting with material pathways in ways that proved to be mutually beneficial. However, in the first two days of the earthquake power and Internet were sporadic—often non-existent. During this time, cell phones were essential technologies for locating family members and connecting with the injured. One of the most commonly requested and donated items for earthquake-affected people was cell phone recharge cards. Cell phone flashlights were essential tools given

disruptions to power supplies.

Still, technologies and virtual mobility networks were not a 'magic bullet.' At the Bir Trauma Center, for example, it was the hard work of the volunteers who recorded vital information from the patients and then sifted through reams of haphazardly documented patient admittance records to reconnect people who had been wrenched apart by the disaster and its aftermath.

While I agree with Sheller's (2012) "islanding effect" assessment in general, interestingly, in Nepal the presence of non-foreign (Nepalese citizens) self-organizing grassroots response teams offers an alternative narrative with the caveat that the "islanding effect" was also present. I argue that this alternative narrative reflects a historical pattern of state administrative dysfunction whereby Nepalese citizens over centuries have learned that they must rely on their own tenacity to bring change in the absence of state functionality.

In others words, the 2015 earthquake while of a greater devastating scale was another in a series of obstacles that have become the lived experiences of Nepalese citizens in a contested national landscape that has seen a legacy of failed development trajectories and cycles of stagnant poverty, a 10-year civil war (1996-2006), the massacre of the royal family (2000), the dissolution of the monarchy (2008) and ensuing political party power struggles and infighting, yearly changes in government leaders, conflict over equitable restructuring of regional boundaries, and increasing general distrust, disillusionment, and frustration with government elites and governance regimes in general. This is highlighted by the fact that 25-34 percent of Nepal's GDP is made of remittances from citizens who have gone abroad to find work

in the absence of jobs at home—a dour reflection on the efficacy of the state embedded with corrupt, narcissistic, and nepotistic political elitism (Bell 2015). As Nepalese academic, Panday (1999:xiv) keenly observed in his classic *Failed Development in Nepal*:

> With the gap between rhetoric and action..., the development practices in the country may soon have consequences more hazardous than the ridicule they could invite from a Havel and a Freire for the underlying hypocrisy and ignorance....Nepal may not be the only country suffering from such pathology. But this is no relief for the majority of the country's citizens whose state of deprivation is matched only by the callous rapacity of the ruling class.

Nothing has changed much in Nepal in almost two decades since the publication of his book as evidenced by Bell's (2015) more recent critique of the same subject. This subject will be dealt with in more detail in the following sections.

Earthquake Context

On April 25, 2015 a magnitude (M) 7.9 (Richter scale) earthquake rocked Kathmandu and many other areas of Nepal. The event was so powerful it lifted the city vertically by one meter and dropped Mt. Everest by about 2.5 cm. (Oskin 2015). The main event was followed by numerous aftershocks; the biggest on May 11 (M 7.3) created another round of destruction. The "Gorkha earthquake sequence" (Collins and Jibson 2015:1)[98] affected eight million people, almost a quarter of Nepal's population (Adyan and Ulusay 2015) and put 2.8 million in need of humanitarian assistance (USAID September 2, 2015). It is estimated that there were close to 9,000 casualties, 22,000 injuries, 605,254 houses destroyed, and 289,255 houses damaged

[98] Collins and Jibson use the term "Gorkha earthquake sequence" as do many others now.

(USAID December 23, 2015) leaving approximately US$7 billion in economic losses (Hayes et al. 2015).

While the initial earthquake was the largest seismic event, aftershocks were inevitable and continued the devastation in the following months. Within the first 45 days of the initial earthquake, Nepal experienced 553 aftershocks of local magnitudes greater than 4.0 on the Richter scale (Adhikari et al. 2015), not to mention the major aftershocks greater than M 4.0 and the main aftershock of May 12, 2015 (M 7.3), which created a whole new round of destruction and chaos, especially in rural areas northeast of Kathmandu. The aftershocks continued and are still occurring presently in Nepal.[99]

Landslides were the main geophysical effect of the earthquake and its aftershocks. One group mapped more than 4,000 landslides (Kargel et al. 2015a), greater than the total for the last five years (USAID June 25, 2015), while other estimates put the total number somewhere between 10,000 and 25,000 (Robb et al. 2015) with the total area affected by landslides in Nepal at 30,000 km^2 (areas impacted by landslides from the Nepal border extended 30 km into China which could increase this estimate by as much as 25 percent (Collins and Jibson 2015). In addition to China, the earthquake sequence caused casualties and damage in India and Bangladesh (Kargel et al, 2015a), affecting a total region approximately 500 by 200 km (Kargel et al. 2015b; Beazley and Lassoie 2017).

Other major earthquakes in Nepal have been reported in the past in 1255, 1810,

[99] See http://www.seismonepal.gov.np/.

1866, 1934, 1980, and 1988 with the 1934[100] event being the most devastating (Pandey et al. 1995). The scientific community had been warning about another major earthquake for a long time, as I describe below.

Earthquake Awareness

On January 16, 2015 just over three months before the M 7.8 earthquake hit Nepal, the nation celebrated its 17th Annual Earthquake Safety Day (ESD). The slogan chosen for this 2015 event was "Earthquake may strike any time, be ready and prepared every time".[101] The annual event was started in 1998 "to raise awareness and share information and experiences on disaster/earthquake risk reduction. It also serves as a yearly memorial and Remembrance Day for those that were lost during the last big devastating earthquake that hit Nepal in 1934 (M 8.1).

The ESD is actually the culmination of earthquake risk management works implemented in the country in the preceding 12 months, and thus allows taking stock of the achievements and shortcomings".[102] In total 11 different events were held in the valley including the Earthquake Safety Exhibition which ran for five days. Events were also scheduled for other parts of the country. Before ESD a regular annual pre-event National Symposium titled *Discourses on Experiences on Earthquake Risk Reduction and Response* was scheduled for January 12-13.

Symptoms underlying the government's inability to respond to the April 25th earthquake surfaced when the second day of the program had to be cancelled due to a

[100] All dates are C.E.
[101] http://www.nset.org.np/esd/national_symposium.php
[102] http://www.nset.org.np/esd/national_symposium.php

general strike called by various political parties.[103] The media helps spread further awareness every year by publishing articles leading up to ESD about earthquake preparedness and hypothetical disaster scenarios. Between January 1 and April 24, 2015, the Kathmandu Post ran at least six stories about earthquake preparedness.

In short, it would be hard to deny that in Kathmandu at least, there was a high awareness that the next earthquake could be coming soon. And certainly, within government circles it was well known at least since 1997.

From 1995-1997 Geohazards International and the National Society for Earthquake Technology-Nepal (NSET) conducted Nepal's first comprehensive seismographic study of the Kathmandu Valley. Based on historical data they concluded that earthquakes of devastating magnitude "occur approximately every 75 years indicating that a devastating earthquake is inevitable in the long term" and that the "people living in the Kathmandu Valley were clearly facing a serious and growing earthquake risk".[104] The last earthquake of this size occurred in 1934. Applying their prediction of approximately every 75 years would suggest that around 2009 the next big one would hit.

The Next Big One

A greater concern about earthquake preparedness rose in Nepal as well as globally after the devastating 2010 earthquake in Haiti. In 2010, Amod Dixit cofounder and executive director of NSET in a media report titled *The Next Big One*

[103] http://www.nset.org.np/esd/national_symposium.php
[104] A summary of the report can be found at http://www.geohaz.org/#!kathmandu-valley-earthquake-risk-managem/qvbxm with links to the full report at the bottom of the webpage.

warned: "If Kathmandu is impacted with a shaking of an intensity IX on the Mercalli intensity scale[105], the aftermath is going to be much worse than in Haiti" (Overdorf 2010). In the same report Robert Piper (United Nations Resident and Humanitarian Coordinator for Nepal 2008-2013) stated, "My preoccupation is how do we reduce the number of people we have to extract from the rubble. That's the mitigation measures, and that's where our preparedness is nothing short of pathetic" (Overdorf 2010:).

Again in 2013 in a report published in the journal *Natural Hazards,* Dixit warned that with a population approaching five million living in a city "with uncontrolled development activities and poor construction practices", and with a "lack of earthquake preparedness" approximately 60 percent of the buildings would be heavily damaged, the death toll could reach 40,000 with an additional 90,000 injuries and some 600,000-900,000 left homeless (Dixit 2013: 638-639). He wrote additional warnings about transportation systems, schools, and Tribhuvan National Airport. Between 2010 and 2015, numerous media and scientific articles about the possibility of the next big one hitting the Nepal Himalayas appeared in (including but not limited to) Chaulagain et al. 2015a; Chaulagain et al. 2015b; Bollinger et al. 2014; Dixit et al. 2014; Chaulagain et al. 2013; Dixit et al. 2013a; Dixit et al. 2013b; Mugnier et al. 2013; Ram and Wang 2013; Ader et al. 2012; Guragain and Dixit 2012; Mukhopadhyay et al. 2011; Guragain 2011; Shanker et al. 2011).

A mere 13 days before the earthquake hit a scientific paper published on April

[105] "Unlike the Richter scale, which measures the magnitude of an earthquake at its epicentre, the Mercalli scale measures the intensity of shaking in specific locations - basically by measuring the destruction of buildings and natural structures" (cited from the preceding reference).

12, 2015 titled *Seismic Risk Assessment and Hazard Mapping in Nepal* (Chaulagain et al. 2015a:583) revealed some disturbing news, "Despite the availability of new data, and methodological improvements, the available seismic hazard map of Nepal is about two decades old. So an updated seismic hazard model at the country level is imperative and logical". In another strange turn of events, Earthquake Without Borders, a group of earthquake scientists, social scientists, and policy makers dedicated to sharing earthquake information, held a meeting in Kathmandu hosted by NSET the week before April 25.[106] In the days immediately after the event at least two journalists would title their report *A Tragedy Waiting to Happen* (Stark 2015; Vashishtha 2015).

Administrative Thrombosis: Government Institutional Failure

The government's slow and largely ineffective response to the earthquakes was due to a number of factors. First, although experts had been predicting this earthquake for a long time, disaster preparedness ended up as a low priority due to the government instability, political party politics, and the preoccupation with writing a new constitution following the 10-year People's War (Lee 2016; White 2015). Second, a weak legal disaster response framework, including disaster response jurisdictional overlaps, created confusion among key players and hampered efficient and effective response (Jones et al. 2016; Gaire et al. 2015). Third, a cumbersome outdated bureaucracy embedded in "the burden of hierarchy" left government employees helplessly hampered by time consuming procedures (Nepali Times 2015; Tamang

[106] http://www.esc.cam.ac.uk/news/earthquakes-without-frontiers

2105).

Finally, the lack of local elections since 2002 made carrying out a comprehensive disaster preparedness and response policy extremely difficult (Robins-Early 2015). An Aljazeera (2015: para 11) news report clarifies many of the weaknesses evident in the response:

> The government acknowledged it had been overwhelmed by the devastation from Saturday's 7.8-magnitude earthquake that killed more than 5,000 people across Nepal - the deadliest in more than 80 years. "There have been some weaknesses in managing the relief operation," Minendra Rijal, the country's communications minister, told Nepal's Kantipur Television."The disaster has been so huge and unprecedented that we have not been in a position to meet the expectations of the needy people. But we are ready to accept our weakness, learn and move ahead in the best way possible."
> There was also desperation in devastated rural areas. People have been pleading to be airlifted out when the occasional helicopter has reached their villages with relief supplies. In Dolakha, angry residents smashed windows of a local administrative building, said Prem Lal Lamichhane, the chief district officer. "More than 200,000 people are homeless. We've been told that materials are on their way, but we haven't received them yet," he said.
> The UN is appealing for $415m to provide for vital needs over the next three months.

The Ministry of Home Affairs (MoHA) serves as the apex institution during disasters. Within the MoHA the Disaster Management Department (DMD) under a joint-secretary has the directive at the central government level to take action during a disaster. At the district level the District Administrative Officer is in charge of coordinating disaster response committees (Koirala 2014). At both levels, problems prevented a coordinated and efficient response.

At the national level procedural protocol prevented the DMD from effectively coordinating the three branches of law enforcement, the Nepal Army, the Armed Police Force, and the Nepal Police. Furthermore, both the Prime Minister's Office and

the MoHA attempted to coordinate search and rescue and relief operations, which led to confusion as to who was in charge and stalled rapid response (Bisri and Beniya 2016). One of the most notable manifestations of this dysfunctional system was at Tribhuvan International Airport where arriving international search and rescue teams lost valuable time waiting on officials to clear them through bureaucratic protocols and then assign them specific responsibilities and customs officials taxed and impounded relief materials (**Figure 6.1**) (Harris 2015; Mulmi 2015; Tamang 2015).

Figure 6.1 Impounded international relief supplies at Tribhuvan Airport waiting for customs and immigration clearance (Source: Danish Siddiqui/Reuters)

In 2010, the government created the National Emergency Operations Center with offices in 44 districts to gather data on natural disasters but with no authority to organize ground operations during an emergency. In 2009, following the advice of experts the government proposed the creation of a National Disaster Management Authority with the mandate to coordinate and command the various ministries and departments during a disaster, but so far, the government has not acted on it (Bisri and

Beniya 2016). At the district and local level after more than a decade without elected officials an effective chain of command and accountability was nonexistent. As a result, local party bosses fought turf wars over the relief materials when they finally did start to arrive (Bisri and Beniya 2016). Tamang (2015:para. 7) sums up many of the inherent problems writing:

> Much can be said about the role of internationals in the dysfunctionality of the airport today, the overall state of Nepal's lack of 'earthquake preparedness' and coordination and other problems in current rescue and relief operations. For the moment, however, it is important to note that reports make clear that it has been the internationals and the non-state sector (with the exception of the Nepal Army) which have played key roles in responding to the needs of the people. With few exceptions, the state has so far performed miserably in the aftermath of the earthquake. While there is a real need to not undermine state authority, and indeed to build state capacity, it must be made clear that rebuilding/strengthening a feudal state is not the goal. The feudal legacy embedded in an antiquated bureaucracy and reinforced by a political elite centered on power and its preservation, must be fiercely critiqued and resisted by all citizens. Prioritisation of the lives of citizens—not the policing of restrictive rules in a time of emergency—should be central. The expedient delivery of relief materials from the airport and other locations to citizens in need must take precedence.

In the following sections I illuminate how citizen's response using various virtual mobility technologies carved out disaster mobility pathways in the gap left by government unpreparedness and dysfunction.

Lived Experiences

I had arrived in Nepal in April 2014 as a Cornell University Natural Resources Department PhD candidate on a Fulbright Hays Doctoral Dissertation Research Abroad Fellowship. I set up my Kathmandu residence at Ram's Rooms, near the Boudhanath Stupa, which I used as a base when not conducting social science research at my site in northern Rasuwa District near the Tibetan border.

Like Sudan Gurung in the opening vignette, I was caught off-guard by the earthquakes, despite all of the ways that the possibility of natural disaster always looms large in Nepal. And, like Sudan Gurung, after these events, I found myself swept up in relief efforts, much of which was facilitated by social media, as well as implicated in various citizen and volunteer responses to these tragedies.

When the first earthquake hit, I was sitting in Ramsterdam Café near my residence in Boudha. Everyone in the cafe got up and ran to the door to see what was happening outside. During my previous career as an adventure travel leader, I had experienced several minor earthquakes in Nepal, India, and southern Chile. During the December 2004 Indian Ocean tsunami, I was only 10 kilometers north of its furthest extent. On that day in Kathmandu in April 2015, I had the immediate sense that something out of the ordinary was happening. Bottles toppled off the shelves and crashed on the floor. Tables vibrated. The earth seemed ready to crack open.

Fortunately, our immediate surroundings sustained little damage thanks to the forethought of Ramsterdam's owner Ram who had built the café with reinforced concrete and only one story high in anticipation of an earthquake. Ram let several of us sleep in the café that night because he was worried that our multi-story residence might be unsafe. The next day, I read about the need for volunteers at the Bir Trauma Center on Facebook and decided to go there and see what I could do.

I took a taxi from Boudha to Bir Hospital and was surprised by the unevenness of the damage I saw en route. In some places, entire houses had been uprooted and were sitting at bizarre new angles. In other places, there appeared to be very little damage. People were driving and walking to the market like nothing unusual had

happened. But it was obvious everyone was on edge. The slightest vibration would send people screaming, fleeing their houses and the rain of concrete and debris inside to seek the nearest patch of open sky. Many people slept outside, creating tarp and tent villages all over Kathmandu. It was difficult for anyone to sleep at night, let alone relax during the day. The slightest vibration—whether from a truck or someone's heavy footsteps on a wooden floor—triggered our collective sense that another earthquake was upon us.

Volunteering with I 2 We

Upon reaching the Bir Trauma Center I felt overwhelmed. The level of chaos was intimidating, as there appeared to be no specific Trauma Center staff person available to coordinate the volunteers in a way that reflected their skills and usefulness. To his credit, Sudan Gurung and his colleagues were doing an amazing job filling in this void as best they could. As Sudan explained, "I 2 We's aim is to create an environment where doctors and nurses can serve patients and carry out their responsibilities without worrying about anything else. We ensure that patients get all the help they require and don't suffer from the lack of food, medicine, blood and proper treatment" (Gurung quoted in Ojha 2015). Their dedication and diligence were infectious. Bibek Man Singh, a visitor to the Trauma Center, describes it as follows:

> I was just a guy who was taking shelter at the Trauma Center with my family. But there I saw Sudan dai distributing noodles and water to everyone around. Seeing his selfless service, I too joined him. Gradually, my mother too started helping him distribute food and water to the needy. I had not known him before, but his tireless work and selfless service inspired me to lend a hand. That's how we came up with the idea of starting I 2 We, a volunteer organization working for the earthquake victims. (Singh quoted in Ojha 2015). When I first arrived at the Trauma Center as a volunteer, I was given the task

of phoning the 40 other volunteers who, after hearing of the need, had come during the day to register their name and cell numbers—all Nepalese. The day shifts were already experiencing an excess of volunteers whereas the night shift had minimal coverage. As I began contacting people, I was surprised how many agreed to do at least a partial night shift. During my first day, I met many Nepalese volunteers as well as a handful of foreigners. Most of the foreigners were trekkers on vacation; some had previous experience in first aid; one was a doctor on vacation from Sri Lanka.

Social media provided an invaluable platform for people to communicate with each other and the outside world about what was happening on the ground during and after the earthquakes. My own social media posts at the time reflect the chaos and shock I experienced when I first started working with I 2 We. After facing a particularly challenging experience on April 28, 2015, I wrote the following on Facebook:

> I was assigned to a nine-year-old girl when I arrived. She had two broken arms, a compound fractured leg, and what they call a 'ping pong' fracture in the top of her head. A huge rock had fallen on her head fracturing her skull. A piece of her skull bone had broken off and was pressing on her brain tissue. She is of the Tamang ethnic group from the village of Haku near where I do research in Rasuwa District. This area is very poor.
>
> This little girl, Tsering Tamang, had to be evacuated by helicopter...There is no road to her village, only a trail, and the nearest roads are all blocked by landslides. If the nearest road had not been obstructed, they still would have had to carry her down a very steep trail, across a river, and then up another very steep hill two to three hours of walking to reach the road in Dunche and find a vehicle to Kathmandu. That road is bad in the best of conditions with three chronic landslide zones that have been active every monsoon since the road was built in the 1980s. Even if the road had been clear, it would have taken at least seven hours for her to reach Kathmandu—if she had been lucky enough to find a vehicle. If she had come by road, she probably would have died somewhere along the way. Her parents could not come with her on the helicopter because it was filled with the injured.

> Her parents are now trying to make their way to Kathmandu, but...there is no telling if and when they will be able to get out. Fortunately, several men from her village managed to get out before the road became impassable; they are here in the hospital with her along with another women from the same village who was injured. They told me that almost every village north of Dhunche has been leveled. (My paraphrased Facebook Post April 28, 2015)

Tsering became my main point of reference. I knew if she was able to survive, then there was hope for all of us. Her tenacity spoke to the ability of many Nepalese to endure chaos, hardship, and adversity in situations they had not created. Her experience highlights the "islanding effect" (Sheller 2012) on those in her village who could not fly out with her and faced the challenges of trying to make their way to Kathmandu in a landscape of landslide blocked trails and roads and crumbling infrastructure. This was true for many earthquake-affected persons throughout Nepal also.

Medical Triage

My next Facebook post described what Tsering faced in the context of medical triage:

> I spent a lot of time sitting with Tsering and talking with her friends from the village in between working on other patients. She was amazingly resilient while she was poked for IVs and pricked with needles for blood tests. The most painful moment was having her limbs temporarily set in casts until they could operate on her. This meant straightening her broken arms and compound fractured tibia (leg bone sticking through wound) with minimal anesthesia. Her crying and screaming for her mom was heart wrenching, but she persevered until about five hours later when, we took her up to the O.R. to clean and suture her head wound. This was another temporary measure to avoid infection until there was time to do the full operation. (My paraphrased Facebook Post April 28, 2015)

Tsering's ordeal was typical of many patients at the Trauma Center and other hospitals in Kathmandu. Overworked and understaffed doctors and nurses set up a

triage system. After a quick assessment, patient priority was identified by either a red or green armband, red meaning immediately life-threatening injuries and green indicating patients whose injuries were minor in comparison. Tsering was wearing a red armband. The skull bone resting on her brain tissue was obviously life threatening and a potential source of brain damage. But it would be twelve hours from the time I first saw her until she was actually in the operating room. This spoke to the steadily increasing arrival of injured in the aftermath of the first earthquake and to the understaffed and at the time not fully operational Trauma Center.

The Trauma Center was supposed to be a state-of-the-art facility with a suite of services to handle almost any conceivable injury. These services included a trauma bay with 150 beds, fourteen intensive care units, six operating theatres, eight emergency resuscitation rooms, ten exam rooms, a triage area, and outpatient facilities. Staffing specialists were to be made up of neurosurgeons, orthopedists, cardiologists, general surgeons, anesthetists, radiologists, and physiotherapists (Gautam 2015). Opened in February 2015 with very limited services, the center was still far from fully operational when the first earthquake hit. Further, the sheer number of critically injured patients meant that even a patient potentially minutes away from death, such as Tsering, still had to wait until those that had arrived before her with equally critical life-threatening injuries were treated. In essence an "islanding effect" (Sheller 2012) was emerging in the Trauma Center, which shows how it can occur even in a microcosm in a capital city. This speaks to one of the main arguments of this chapter, namely that it was the volunteers who helped fill in the gaps to lessen the "islanding effect".

In general, the operating theater looked like a war hospital; patients moaned in agony as doctors and nurses wheeled one patient out and the next one in. Blood and dressings covered the floor. The volume of patients made the cleanup crews' jobs an almost impossible task. Doctors and nurses worked to the point of exhaustion. I worked closely with the doctor from Sri Lanka. I sensed her frustration as she offered her services but was never given a task up to her skill level.

The Trauma Center has seven floors, but only the first three floors were being used. On the upper floors, many rooms looked neglected and abandoned; furniture covered with plastic and a thick coating of dust spoke to the political battle that had ensued after the Trauma Center's construction (**Figure 6.2**). The negotiation over which institution would be in charge of the Trauma Center had been ongoing since the end of the Peoples' War in 2006. After a lengthy and controversial legal battle over jurisdiction, the Trauma Center jurisdiction was finally determined by Nepal's Supreme Court in favor of Bir Hospital.

As post-earthquake days passed, sanitation became a big concern. At one point, more than 100 decomposing corpses were stacked behind the Trauma Center waiting to be identified by a family member before they could be removed and cremated. Inside the Trauma Center, the staff could not keep up with the increasing number of patients. Again, institutional politics was to blame, as the staff had been hired exclusively by one of the administrators and, as in many institutions in Nepal, consisted mostly of his friends, relatives, family members, and those he owed favors to for helping him get his administrative posting. Most of these individuals were neither well trained nor able to cope with the situation in which they found

themselves.

Figure 6.2 An empty room on the fourth floor of the Bir Trauma Center (Photo by author 2015)

Outside the front entrance of the Trauma Center, a collection center was set up for donations of food, water, clothing, and medical supplies. Some medications were provided free of charge, but as supplies dwindled many volunteers used their own money to purchase essential drugs and other medical supplies, as well as food and water for the injured. Family members slept on the floor next to their loved ones. If there was no room on the floor, people camped on the stairs and in the lobby. Volunteers also found themselves sleeping on the floor when they neared exhaustion (**Figure 6.3**).

One day, I spent all afternoon logging the medical supplies and pharmaceuticals that had piled up at the I 2 We donation center. The next day, a

female doctor organized a group to bring many of these supplies to outlying areas where medical teams had not yet reached. Soon, the number of volunteers reached more than 1,000.

Figure 6.3 Volunteers catching some much-needed sleep outside the Bir Trauma Center (Photo by author 2015)

Some volunteers began organizing similar missions further afield (**Figure 6.4**). These improvisational efforts were particularly salient as they were based on context-specific information that was filtering in from patients and refugees arriving from mountainous areas where communication had been cut-off and where state or large-scale humanitarian organizations' efforts had neither been focused nor prioritized.

The Role of the Media

Through both social media and conventional news platforms, word spread about compelling stories like Tsering's, often to the point where news teams began

lining up to get their crack at a story. Some patients became earthquake-injured celebrities. Their stories were reproduced on different networks. News teams from around the world began arriving as more images reached the global public.

Figure 6.4 A doctor organizing supplies to treat earthquake-affected people outside the Kathmandu Valley (Photo by author 2015)

A *Time* magazine correspondent pulled me aside to get the perspective of a volunteer. His hurried demeanor spoke to the focus of the media. I was his last interview, and he was racing against the clock. He needed to board a plane that afternoon to cover the next big story in some other part of the world. At one point, Dr. Sanjay Gupta, CNN's chief medical correspondent, arrived from the United States. This led to a televised interview with him as he performed brain surgery on a young

girl.[107] Journalist Tim Hume (2015) described this moment as follows:

> The cries of 14-year-old Sandhya Chalise can be heard above the din of the admissions room at Kathmandu's Bir Hospital. Blood has collected on top of her brain, in the right frontal area, and she urgently needs surgery to remove the clots. "The wall of her house fell on her during the earthquake," says Dr. Bikesh Khambu, a resident neurosurgeon at the hospital. An hour later, she receives a craniotomy in a makeshift operating room. Dr. Sanjay Gupta, a practicing neurosurgeon and CNN's chief medical correspondent, has scrubbed in at the request of a Nepalese medical team to help with the operation.

The story turned controversial when it was discovered that Gupta had gotten the name and age of his patient wrong and had failed to get permission from the family to televise the operation. And yet, despite these serious ethical missteps and his celebrity stature, his comments below reflect the same desperate situation in all the hospitals in Kathmandu.

> I've seen a lot of situations around the world, and this is as bad as I've ever seen it. They need more resources, they need more personnel here right now, and they're expecting many more patients as these rescue operations go on. They're barely able to keep up right now. It's part of the reason they asked me [to help]; I think they're asking anybody to try to pitch in. (Gupta quoted in Akkoc 2015)

Despite its at times intrusive, insensitive, voyeuristic, and exploitive nature, the media coverage of the earthquake *did* get the word out. As is often the case in Nepalese health care settings, patient privacy was neither a concern nor, at times, an option. And yet in some cases patients were put in an awkward position of grabbing their 15 minutes of fame at a moment of crisis. We are left asking how to balance these elements with the good they did by drawing global attention to Nepal.

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[107] See http://www.cnn.com/2015/04/27/world/nepal- earthquake-bir-hospital/

Amputation, Disability, and 'Celebrity Victims'

The number of patients at the Trauma Center that had sustained injuries that required amputation was staggering. Many of these were children. Handicap International's presence was strongly felt at the Trauma Center with their staff training patients how to use crutches, adjusting prosthetics, teaching patients how to walk again, and offering support and comfort.

I met Nirmala and Khendro, two eight-year-old amputees, while volunteering at the Trauma Center. They became media personalities. Despite the amputations and the disaster, they both appeared to be adjusting to their new situations quite well. Khendro, a little ball of energy, would zoom around the room on her crutches as if nothing had happened to her (**Figure 6.5**). She was charming, gregarious, and loved make-up; she told us that she aspired to be an actress. Khendro, who occupied a bed not far from Nirmala, was more reserved but equally charming. The two became best friends and 'star' patients of Handicap International.[108].

Their stories were so compelling and their personalities so charismatic that they were featured in more than 20 media articles. Here is one example from a traditional media source, and an example of a powerful 'victim' narrative that created a sense of virtual participant-experience for the consuming public:

> The sounds in the trauma ward of Bir Hospital two months after the Nepal earthquake were hard to take: The screams of patients suffering with fractured bones, or mourning for amputated limbs, as helpless family members attempted to comfort them.

[108] See http://www.handicapinternational.us/from_nepal_quake_injury_to_acting_dreams_nirmala_stands_tall/

Figure 6.5 Nirmala on crutches in the Trauma Center (Photo by author 2015)

> I couldn't bring myself to take out my camera and point it at people here, so instead I tried to comfort them, too, and listen to their stories. I was drawn to a corner of the ward where a young girl missing a leg was smiling while doing physiotherapy. She was the only patient with a smile. That was the first time since the earthquake I felt such deep contentment. Nirmala Pariyar, now just 8 years old, lost her right leg. A few days after my visit, I returned to see Nirmala and her family. "Uncle, you're back again," she said, flashing me that smile.
> I followed Nirmala and her family over several months. One day, I saw another 8-year-old girl, Khendo Tamang, lying in the bed next to Nirmala. She was crying and holding her mother, whose faced showed her anxiety. Khendo had lost not only her left leg, but her elder sister and grandmother. (Shrestha 2016: para. 1)

While these stories had many graphic compelling details and may have ultimately helped Nirmala and Khendro, they ignored countless other patients with similar or worse conditions, even as it would have been virtually impossible to report all such stories. And yet, apropos of 'celebrity victims,' Khendro ended up getting full boarding school sponsorship from abroad, while Nirmala's father searched his notes

for the email address of the young European couple who had visited Nirmala in the Trauma Center and promised to help but had not contacted him since then (Sullivan and Shrestha 2016). Here too, the unevenness of celebrity victimhood was apparent. And, fifteen minutes of fame is not much consolation for a life as a disabled person living on the fringes of an already marginalized existence (Lord et al. 2016).

Mobilization in Areas of Social and Institutional Neglect

It was truly impressive to see the worldwide response to the earthquake. A total of 54 search and rescue (SAR) teams (2,080 personnel including staff) arrived in Nepal to help with the response (Shenhar et al. 2016). While I was volunteering, search and rescue teams from India, Israel, Japan, and the United Arab Emirates visited the Trauma Center (**Figure 6.6**). And yet, much of the immediate response to the earthquake centered largely on the Kathmandu Valley creating the "islanding effect" (Sheller 2012) for many villages in the Himalaya as well as isolated pockets within the valley (Linder 2017). Within days, however, a second wave of response from Nepalese volunteers emerged, as several groups of talented, dedicated, and resourceful Nepalese citizens began the process of supplying aid and resources to communities in earthquake-affected districts across their country.

One example of such mobilization—and its intersections with social media as well as diasporic Nepal—came in the form of the Nepalese American Nurses Association (NANA), a group based in New York City that, via Facebook, began collecting funds and medical supplies in Jackson Heights.

Figure 6.6 Indian search and rescue team outside Bir Trauma Center (Photo by author 2015)

In May 2015, NANA nurses flew to Nepal, where they not only volunteered at the Trauma Center but also hard-hit areas outside the Kathmandu Valley. A NANA Facebook post describes the sense of urgency and frustration that these nurses felt in reaction to the government's lethargic and ineffective post-earthquake response.

> Njima Sherpa, a Nepal-born Manhattan nurse, said what's desperately needed in Nepal is more medical trauma experts—and helicopters to reach remote villages in a landlocked nation topped by the forbidding Himalayas. Emergency funds from abroad must counter the political instability, poor infrastructure and poverty that make recovery difficult. Hospitals are running out of supplies and beds. "We can't wait because people aren't being treated, and they're dying," said Sherpa, who comes from a totally wrecked village under Mount Everest. She lost a cousin. As for others, "I have no idea what's going on...Out of frustration," she said, Sherpa plans to fly to Nepal with a medical crew organized by the Nepalese American Nurses Association. The earthquake has changed relations in the U.S. Nepali community, roughly divided into ethnic Sherpas and Tamangs. "Before, everybody was on their own, rushing and running," said Indra Tamang. "Now, everybody feels united." (NANA Facebook post April 28, 2015)

I met three of the NANA nurses (including Nijima) while volunteering at the Trauma Center, and I continued to follow their activities outside Kathmandu through

Facebook (**Figure 6.7**). This is just one example of the way bonds were created between people near and far, and how social media helped to galvanize response to what was widely felt to be government inaction and neglect. When I visited one of the nurses in Jackson Heights in 2017 to follow up, they were still providing support for some of their patients in Nepal.

A final example of such a grassroots and social media-inflected response was an initiative called Rasuwa Relief, in which I was directly involved (**Figure 6.8**). Working with a group of other volunteers, mostly Nepalese friends, we began organizing interventions to help address areas of social and institutional neglect in Rasuwa District where three of us had spent several months doing ethnographic research (Murton, Lord, and Beazley 2016).

Figure 6.7 NANA nurses (left to right) Nijima, Laxmi, and Sarita from New York City visit Bir Trauma Center (Photo by author 2015)

Figure 6.8 An early meeting of Rasuwa Relief co-founders Galen Murton (l), Sneha Moktan-Lord, and Austin Lord (r) at their makeshift headquarters in the Soma Café Kathmandu (Photo by author 2015)

Through our work as Rasuwa Relief, we pursued a variety of collaborations with various other grassroots humanitarian initiatives such as the Himalayan Disaster Relief Volunteer Group[109] (a.k.a. "Yellow House"), Kathmandu Living Labs[110], and the Phulmaya Foundation[111], led by Rajeev Goyal, another colleague from Cornell and founder of KTK-BELT[112]. Most of these connections were facilitated through Facebook and other social media networks. We used online crowd-sourcing technologies to raise funds, reflecting a pattern of self-organization that has become increasingly common in the wake of disaster as in everyday life.

While working as Rasuwa Relief, we also became aware of the many areas that were overlooked by both state and other volunteer organizations. Connections through

[109] See https://www.facebook.com/hdrvg/
[110] See http://www.kathmandulivinglabs.org/
[111] See http://www.himalayanconsensus.org/kavre- earthquake-relief/
[112] See http://www.huf ngtonpost.com/rajeev-goyal/ creating-an-8000-m-vertic_b_9289050.html

social media helped us map and respond to grassroots needs in neglected areas (**Figure 6.9**). From my volunteer experience with ActionAid India[113] in the aftermath of the December 2004 tsunami, I had learned how relief efforts that are not well organized and non-collaborative can be ineffective and wasteful.

I remembered watching truckloads from various relief organizations arrive in coastal Tamil Nadu—with the same supplies. While many of these supplies were important, the overlap led to stockpiling supplies to sell later on the black market. The most disturbing aspect of this dynamic was that every organization deployed interview teams that went house-to-house with a questionnaire to document supply distribution.

Figure 6.9 Main Rasuwa Relief field coordination Bikram shows a local Rasuwa villager how to use a solar cell phone charger (Photo by author 2015)

Practically speaking, this meant that families had to relive their experiences each time

[113] See https://www.actionaidindia.org/

in order to be the recipients of aid.

In the case of Nepal, despite the tremendous worldwide response, the competitive nature of large donor organizations and the country's geographically and politically challenging landscape meant that significant gaps in response existed again creating the "islanding effect" (Sheller 2012). A great deal of effort was directed at the delivery of immediate material aid, while the need for psychological aid and counseling was largely overlooked by the government in the first few months following the earthquakes (Bhusal 2015; Kathmandu Post 2015a, 2015b; Maharjan 2015).

Mental Health and Emotional Support

Mental health has been a chronically underdeveloped and underfunded part of the Nepal healthcare system (WHO 2016; WHO-AIMS 2006). As Seale-Feldman and Upadhaya (2015:para. 4) explain:

> Nepali policymakers and international donors see this moment as an opportunity to strengthen what has historically been a weak mental health system, where less than 1 percent of the government's total health budget has been allocated to mental health and there is one practicing psychiatrist per million people (WHO and Ministry of Health and Population Nepal 2006).

This gap was largely filled by NGOs, Buddhist monasteries (Lions Roar Staff 2015), and other grassroots initiatives. However, these efforts were largely unreported by the media.[114]. One novel approach to addressing this gap brought traditional healers such as *amchi* (Tibetan doctors) who could provide spiritual and psychological support to Buddhist regions across Nepal. As one example, *Amchi* Tenzing Bista[115] organized a

[114] See https://www.youtube.com/ watch?v=t9GlztPipVM
[115] See https://www.facebook.com/tenjing.bista.7

series of mobile *amchi* camps designed to bring traditional Tibetan medicine (*sowa rigpa*) to Buddhist populations in earthquake-affected regions (Craig 2015). This included a series of camps facilitated by Rasuwa Relief, which brought Tibetan Medicine and ritual practice to 1,097 patients in Upper Rasuwa one year after the devastating event that leveled Langtang, in a community still struggling with chronic physical and mental health problems. This initiative provided a sense of comfort as well as direct medical intervention to people in Rasuwa.

Emotional support was another vital service that volunteers supplied not only in the Trauma Center but with other volunteer groups I observed as well. Many patients had no family members present at the Trauma Center; the care and compassion the volunteers showed was invaluable. One group of young Nepalese women arrived and spent days and nights comforting patients as if they were their own family. It was both inspiring and heart-wrenching to see the compassion that poured out of them so selflessly. This group also took discharged patients who had no one to take care of them to their group home to provide further care.

Much has been written about the efficacy of team sports in dealing with psychological trauma including posttraumatic stress disorder (PTSD) (Radley 2015; ESSA 2014; ACPMH 2013; D'Andrea et al. 2013). In a comprehensive report on the efficacy of sports as a treatment for PTSD from both human-made and natural disasters including earthquakes, Henley (2005: 31) concluded:

> The true effectiveness of using sport as an intervention to help children overcome suffering and distress is not in competition but in cooperation, not in winning or losing, but in the process of participating in a supportive group.

That coaching can be about sports, about values, and about giving emotional support to children. These aspects of psychosocial sports interventions all point to the crucial element of relationship and connectedness as a community, which feeds both the individual's and the community's resiliency and strength to recover.

Rising Cricket for Women[116] (RCW) is the brainchild of Laxmi, a seasoned women's cricket player who had already won numerous cricket awards even though she was only 20 when I first met her in early April 2015. After telling her about my volunteer work with I 2 We she and others from RCW came to the Trauma Center to help[117]. RCW brought encouragement and donations to patients in the Trauma Center, and offered to teach them how to play cricket after their recovery (**Figure 6.10**). I could see evidence of this sort of positive impact through RCW in Nepal's post-earthquake moment, particularly in relation to mental and emotional health.

Figure 6.10 Rising Cricket for Women founder Laxmi (back) and team member Sunita (fore) offering Tsering an official Nepal cricket jersey in the Trauma Center (Photo by author 2015)

[116] See https://www.facebook.com/Rising-Cricket-for- Women-RCW 476199939197379/
[117] See https://thehimalayantimes.com/sports/rising- cricket-women-outplay-apf-claim-attariya-cup-womens- cricket-tournament-crown/

I had begun working with RCW in the context of my research on gender and mobility in Nepal. After reconnecting with them in the Trauma Center, I helped RCW organize a series of cricket training camps in communities where I had conducted research in Nuwakot and Rasuwa, and at camps for internally displaced persons (IDP) in Nuwakot and Bhaktapur. These cricket camps helped young people deal with the psychological trauma of the disaster and its aftershocks, bringing together family members and friends from different communities to cheer them on. During these camps, RCW also spent time talking to community members about their experiences of the earthquake, as well as wiring and distributing solar units to villages without electricity. Involvement in community activities like this helped people feel as if a sense of normalcy was returning to their lives—contributing to emotional and psychological healing (**Figure 6.11**).

Figure 6.11 RCW founder Laxmi teaching a young girl how to bat at the Bhaktapur internally displaced persons camp (Photo by author 2015)

The Volunteer as Patient

I had not expected to find myself in the role of patient. However, I became a patient at the Trauma Center after an accident in which I fractured my upper right femur on May 12, 2015. This accident and subsequent surgery gave me a deep sense of appreciation for the challenges faced by so many of the earthquake-affected people that arrived at the Trauma Center and a profound gratitude for the selfless dedication of the doctors and nurses. As I was recuperating in the outpatient room, it was heartwarming to be chided by my fellow I 2 We volunteers about how Americans are always turning the tables in foreign countries: once a volunteer and now a patient being cared for by the same volunteers with whom I had worked. After my surgery, a volunteer from Handicap International helped me adjust my crutches and reminded me of how to use them since I had not been on crutches since I was teenager.

On August 25, 2015 I was involved in another more serious vehicle accident, fracturing my upper and lower right leg. Twelve hours after being transferred to four different hospitals for evaluation, and searching for a hospital with a neurologist, I entered the operating room. The second accident was an intense study in the long-term recuperation that so many earthquake-affected had to endure to heal to the point where they were able to start to take care of themselves and begin to return to 'normal' life. This is something I am still struggling with, six operations and two years after my second accident.

It is really difficult to understand the many hurtles persons with disabilities (PwD) have to overcome just to go shopping, until you are a PwD yourself. In the global North, we have the resources and technology to make a PwD's life relatively

easy. In places like Kathmandu, where the streets are anything but wheelchair and walking-aid friendly, I found that only my finely tuned sense of humor and of the absurd sustained my daily street expeditions.

I was truly surprised when, on the streets of Kathmandu, I was actually drawing attention to myself by hobbling down the road on crutches with five pounds of metal including ten-inch screws, carbon fiber stabilizer rods, and accompanying adjustment nuts sticking out of my right tibia. This contraption is called an external fixator (**Figure 6.12**). It is used to stabilize bones from the exterior while they heal internally. I had seen numerous children in the Trauma Center, including Tsering, fitted with these Robocop-looking paraphernalia. Now, once again, I was getting a lesson in what it felt like to be a socially marginalized PwD, despite the benefits still afforded me by virtue of my Americanness.

Figure 6.12 Rising Cricket for Women team members Sunita (fore) and RCW founder Laxmi (back) in Trauma Center with young boy fitted with external fixator. (Photo by author 2015)

Conclusion

The Nepal earthquakes of 2015 and their aftershocks exposed gaps in the state's institutional ability and willingness to address catastrophe left in the vacuum of work that could have been done on earthquake preparedness. Despite having a library of information on when the 'next big one' would occur, numerous warnings about the next earthquake being long overdue, and how to prepare for it the government largely ignored measures they could have taken to be better prepared. The Nepali proverb *moka aauncha parkadaina bageko khola pharkadaina* (opportunity comes but does not linger) was largely lost on the political elites distracted by power grabbing and inter-party squabbles. Instead, they chose to take advantage of the chaos created by the earthquake to push through a new constitution that probably would have been highly contested if citizens had not been distracted (and rightly so) by the earthquake (Kahlid 2015; Sharma and Berry 2015). The events that have unfolded in the aftermath of Spring 2015 have exacerbated the lack of trust between Nepalese citizens and the state. While the government has made efforts to organize earthquake reconstruction through the National Reconstruction Authority, the success of the government's claim to 'build back better' remains to be seen.

In this chapter, I have highlighted the ways that different kinds of self-organizing citizen and volunteer responses to the 2015 earthquake helped fill gaps created by institutional dysfunction, and how social media and more traditional forms of media played crucial roles in these efforts, circumventing the "islanding effect" (Sheller 2012). The lived experiences of disaster mobilities speak to the importance of the role that technologies played in responding to disaster; they also heighten the

virtual mobility pathways of the volunteers, relief workers, and earthquake-affected people.

The importance of virtual mobility embedded in disaster mobilities cannot be understated. In the absence of social media outlets and cell phone coverage many of these gaps would have remained neglected. One of the important lessons learned from this and the literature on disaster mobilities is that preparation for disasters should be an ongoing project at multi-scalar levels from the central government all the way down to the community and individual level. Local level warning and response networks could be set up with virtual mobility technologies that most villagers already have such as cell phones. Integrating such a local level system would be feasible to integrate into district and regional level systems.

This is the most basic level and would require very little capital. The part that would require hard work is organizing the system through the dense bureaucracy and layers of government institutions. As noted above the messy and contested landscape of these numerous scalar state regimes is one of the reasons why the government was so unprepared, slow in responding, and ineffective in dealing with the disaster. The government would be wise to study these citizens' grassroots responses as a model for rebuilding and strengthening the state's disaster response framework and institutions.

My time at the Trauma Center also highlighted the state of health care in Nepal, revealing specific problem areas where disaster mobility pathways had blockages, such as mental health care and services for persons with disabilities (see Acharya et al. 2016; Maru et al 2016; Sharma 2013). To its credit, the Bir Trauma Center provided free services to any earthquake-affected patient, filling a vital gap left

by other expensive private hospital. A majority of the Center's patients came from traditionally poor mountainous areas of Nepal. And yet, the quality of healthcare was extremely uneven. High quality medical care typically remains expensive by Nepalese standards and out of the reach of most earthquake-affected patients. In this regard the Bir Trauma Center established an emergency disaster mobility pathway for hundreds of earthquake injured Nepalese who could not afford treatment in other hospitals. Furthermore, it was Sudan Gurung's efforts organizing volunteers and their use of social media and other virtual mobility technologies that helped fill in the gaps of the understaffed and unprepared Trauma Center.

As a way of illustrating these points, let us return, in closing, to the example of Tsering Tamang. Upon discharge from Bir Trauma Center, she was referred to an improvised rehabilitation facility run by an organization called the Nepal Healthcare Equipment Development Foundation (NHEDF)[118]. This home, organized by volunteers and supported through informal networks, was a citizen response to non-functional and non-existent state institutions. Despite the free treatment Tsering received at the Trauma Center, she did not have access to any state-funded rehabilitation center. When I last visited Tsering at the NHEDF rehabilitation center, she was all smiles, having taken her first tentative steps on her newly healed leg (**Figure 6.13**). This moment represented the collective first steps of all earthquake-affected people in Nepal: tentative, hopeful, forward looking, and with a strong sense of determination.

[118] See https://www.facebook.com/NHEDF/

Figure 6.13 Tamang family reunion—Tsering is reunited with members of her family in the Bir Trauma Center (Photo by author 2015)

CHAPTER 7
CONCLUSION

This dissertation argues that mobility pathways are both material and social landscapes. Mobile people interact with the environment they travel through whether by foot or vehicle and at the same time they negotiate social relations with those with whom they travel, with other travelers, with communities along the way and at their final destination, and with those they leave behind. What appears on maps as a line connecting places is an illusion that only speaks to the materiality of mobility-scapes at the expense of the complex cultural, gendered, geopolitical, economic, and social experiences of the wayfarers traversing along those lines.

In a constellation of ways, the social lives embedded in mobilities shape events and circumstances not only in their immediate vicinity but at multiple scales as well. What appear to be rational linear development trajectories on paper emerge as messy, and chaotic processes in "'sticky' places in 'slippery' space" (Markusen 1996) on the ground. The preceding chapters untangle this process using a mobilities framework, arguing that this framework brings legibility to complex and convoluted material and social landscapes while at the same time providing purchase to analyze the frictions inherent in state-making development trajectories and in their absence.

In the Trishuli Valley, newly revived transnational overland trade routes are fashioned alongside multiple emerging hydro projects. While the methods of commodity-transport for the trade route are new, the corridor it follows is embedded in historical/social memories of Trans-Himalayan trade and geopolitical wrangling for centuries. The historical mobilities process that shaped the Trishuli Valley is mirrored in the present but in contemporary geopolitical space and velocity. As a way of illustrating this point a brief historical sketch is useful.

In the 18th Century, Chinese imperial troops pushed their way through the Rasuwagadhi border, all the way down the Trishuli Valley to within a day's march of the capital. In the 21st Century, Chinese tourists with free tourist visas offered by Nepal follow the same route to Kathmandu and beyond,[119] while Chinese hydro project laborers and their bosses mix with their Nepalese counterparts just five kilometers

[119] Lumbini, on Nepal's southern border, had 15,770 Chinese tourist arrivals in 2017 compared to 8,598 in 2012, more than doubling in 5 years, a 54 percent increase (Nepal Tours nd). These numbers are projected to increase even more after the Gautam Buddha International Airport near Lumbini opens in 2019 (Kathmandu Post 2017). If and when the Trans-Himalayan Railway is constructed (connecting the Qinghai-Tibet Railway to Kyirong-Rasuwagadhi-Kathmandu and Lumbini), Chinese tourist numbers are expected to skyrocket, not only in Lumbini but many other tourist destinations in Nepal as well (Chowdhury 2018). Pokhara is another popular Chinese tourist destination especially after the 2013 Chinese romantic film "Up in the Wind" debuted, which featured Pokhara, Kathmandu, and Himalayan scenery (Bhandari 2017).

south of the Rasuwagadhi border. The majority of these tourists do not see and are not aware of the Rasuwagadhi Fort they pass as they cross the bridge to Nepal. The fort was built by Nepalese Prime Minister Jang Bahadur Rana in the 19th Century to prevent another Chinese military invasion (Cowan 2013). And in Boudha, the largest Tibetan enclave in Kathmandu, Nepal armed police in riot gear patrol the area to suppress Free Tibet demonstrations by Tibetan refugees in exchange for Chinese "gifts of development" (Yeh 2013).

In the blur of globalization, historical mobility-scapes become entangled in the circulations of transnational flows of hydropower development contracts, capital accumulation, gifts of development, humanitarian aid, and tourism political economies. My mobilities framework brings transparency to historical and contemporary landscapes embedded in gendered, trade-transport, and hydro project mobilities.

I further argue that untangling a mobilities history in the Trishuli Valley helps understand how gendered mobility has been influenced by tourism, school sponsorship, and education (*Chapter 4*). Over several decades these processes of these mobilities have had cascading effects, with the majority of Rasuwa children along the Langtang National Park trail now in boarding schools and the cascade of educational

opportunity beginning to flow along the Tamang Heritage Trail. There are asymmetries within the cascading effects brought out by micro contexts such as the preference for sponsoring Tibetan refugee children at the exclusion of Tamang children in Old Syaphrubesi. This points to an inherent characteristic of mobilities—they are sociocultural, economic, gendered, and materially contested landscapes embedded with local and geopolitical processes with uneven outcomes. In this case, it is similar to Sheller's (2012:185) "islanding effect" in the context of the Haiti earthquake showing the "astounding interdependence and fragility of the complex mobility systems".

In addition, I illustrate how women are shaping economic mobilities in the hybrid spaces created by converging hydro project and trade-transport mobilities. These potentialities would not be present without the convergence of the two mobilities and the hybrid space they produce. In this regard, *Chapter 4* serves as template for the remaining chapters.

An in depth look at hydro project mobilities (*Chapter 5*) articulates how local actors as project-affected persons have fashioned spaces of agency by leveraging hydro project benefit sharing mechanisms and the corporate social responsibility paradigm to bring development in the form of local roads, skills training, school

upgrading, and drinking water supplies to their communities in the absence of the state. This speaks to historical center periphery state marginalization and neglect. Local voices give us an inside investigation of local hydro project-road building bringing coherence to this messy, convoluted, and volatile contested political landscape. I argue that local actors have shifted the center of gravity toward the periphery, re-orienting the frontier[120] versus homeland (Kassam 2001) gaze away from the national center to one of future imaginaries of the Trishuli Valley as a homeland more developed and modern than Kathmandu.

But the process is inchoate and complicated with 'green roads' regulations, contractor malfeasance, and disinformation campaigns. Money allocated for local roads is siphoned off by local elites to reward contractor friends that bypass green roads regulations using machines in place of human labor, increasing their profit margin. At the behest of hydro project managers, social mobilisers act as disinformation disseminators to prevent villagers from pursuing their demands as project-affected people. The complexity of coupled and converging mobilities is evidenced here as coupled hydro project-road mobilities. This blurry landscape is

[120] The frontier here means the previous material and social landscape of Rasuwa and its subordinated Tamang population in relation to Kathmandu and its dominant Hindu Khas-Aryan elites.

brought into focus under the lens of a mobilities framework.

In *Chapter 6* I show how grassroots self-organizing earthquake aid initiatives using virtual mobility technologies created disaster mobility pathways to fill in the gaps left by the state's dysfunctional disaster preparedness response. I argue that virtual mobility technology was crucial in organizing these initiatives, disseminating vital information that helped target areas that had been overlooked by the state and by large cumbersome international aid institutions.

Cell phones emerged as a primary vector for communication not only for aid volunteers but also for earthquake-affected people in connecting with aid, loved ones, and family members. Facebook and other social media platforms provided real time update feeds as well as an arena for crowd sourcing aid funds. Open source mapping software facilitates volunteers to create quake maps for correlating local and global humanitarian aid data. But it was the hard work of the volunteers that made these technologies salient in the post-earthquake period. Focusing on three volunteer groups, I2We, Rasuwa Relief, and Rising Cricket for Women, I elucidate how volunteers navigate disaster mobility pathways with the use of virtual mobility.

Taking a multi-sited approach, I illuminate how on-the-ground volunteers using virtual mobility technologies fashion disaster mobilities within an urban

institutional setting as well as in self-organizing informal institutions in the rural Himalayas. I address gaps and deficiencies in the state's response to the earthquake as well as areas in the health system that need to be addressed such as mental health and services for people with disabilities (PwD). Finally, I offer a reflexive narrative of my involvement in volunteer initiatives, as an 'accidental victim', and as a PwD bringing legibility to disaster mobilities as well as important insight into under studied populations in Nepal.

As a way of further illustrating my mobilities framework it is instructive to revisit the three seminal events of 2015 with a little more context—the earthquake, the promulgation of the new Nepalese constitution, and the conflict on the southern border in reaction to the constitution.

As mentioned previously, amidst the chaos in the aftermath of the Gorkha Earthquake Sequence, the Nepalese government managed to push through a new constitution, which many speculate would not have been ratified, if not for the emergency situation. Historically marginalized groups including women, Madhesis, and Tharus who live along the southern border, felt it did not give them equal representation (Haviland 2015). Nonetheless, it received the required number of votes to pass in the Constituent Assembly and was promulgated on September 20, 2015. In

protest the Madhesis immediately began a blockade of southern border road crossings, effectively stopping all vehicular movement. On the streets and in the press, speculation pointed an accusing finger at Delhi, blaming India for fomenting an unofficial blockade in response to Nepalese leaders ignoring Delhi's suggestions for more inclusiveness in the new constitution (Pokharel 2015). Historically, India has been the sole source of petrol supply to Nepal, so the effects were immediately felt in Kathmandu and the rest of the country.

The southern violence and demonstrations had effectively reduced the number of Nepalese fuel trucks returning from India to a trickle for more than a month (Khanal 2015). As the blockade dragged on, the restricted mobility not only affected the urban population but it also seriously hampered earthquake relief efforts with the price of petrol tripling and eventually no longer available for private vehicles. In response Kathmandu shifted its gaze north.

On Wednesday October 28, 2015 an eight member Nepalese delegation signed a "historic" (Prasain and Khanal 2015) and "unprecedented" (Thapa 2015b) agreement with the Chinese government in Beijing whereby the China National United Fuel Corporation would initially supply the Nepal Oil Corporation with one third of Nepal's fuel needs "at international rates" (Pradhani 2015). In addition, China agreed

to provide Nepal with 1,000 tons of fuel (Khanal 2015) as a grant to help relieve the immediate effects of the southern blockade. Media reports critiquing the China versus India geopolitical card playing highlight the two-sided coinage of Nepal's landlocked geography, at once vulnerable but at the same time with the potential to play one side against the other and bolster its vulnerable status into one of strength. In fact, the day after Nepal played the China petrol card, the Indian Oil Company upped their supply to Nepalese tankers to the highest level in five weeks (Khanal 2015).

In the aftermath of the earthquake, however, China wasted no time in sending its largest ever international humanitarian aid mission (to any country) to Nepal. It was instrumental in clearing and repairing the earthquake damaged roads on either side of the border crossings at both Rasuwagadhi and Kodari by mobilizing the Road Repair and Rescue detachment of the Chinese People's Armed Police Force. But only Rasuwagadhi was deemed ready for commerce again (China Daily 2015). After signing the Chinese fuel deal, by early November, 12 tankers with 80,000 liters of fuel had arrived in Kathmandu (Thapa 2015c) via the Rasuwagadhi border crossing and additional Chinese goods bound for Nepal had arrived in Kyirong (Setopati 2015) as well as promises of liquid petroleum (cooking fuel). Moreover, an additional 27 tankers were on their way back from Kyirong with another allotment. In the end, a

total of 71 tankers with Chinese fuel within eight days (Samiti 2015a).

Given the chronically poor condition of the Rasuwagadhi link to Kathmandu, the Pasang Lhamu Highway (a.k.a. Galchi-Syaphrubesi-Rasuwagadhi road), it is not surprising that the returning truck drivers immediately complained stating that it must be upgraded before they would travel it again (Rathaur 2015). Future plans to import more fuel on a commercial scale were peppered with talk about upgrading the Rasuwa highway route, a Chinese petrol pipeline from Kyirong to Nuwakot (Samiti 2015b) and an uninterrupted fuel supply once the railway from Shigatse, where the fuel supplies are stored, to Kyirong is completed. This has focused a renewed emphasis to open additional Nepal-China border crossings (Shrestha, P. 2015), and talk of a Trade and Transit Treaty giving Nepal access to Chinese sea ports facilitating third country trade (Himalayan Times 2015).

During the 28th Nepal China Border Customs Meeting (November 2–7, 2015) a number of comprehensive agreements were made to help ease commerce and trade between the two countries including improvement of infrastructure at both Kodari and Rasuwagadhi as well as continued Chinese aid in constructing dry ports for both locations, a 20-point agreement to investigate border infrastructure effectiveness by a joint team, a renewed push to "operationalize" seven other official border crossings,

and permission for Nepalese trucks, drivers, and traders to enter Chinese territory (Shrestha, P 2015).

This is in keeping with a trend of increasing aid from China, which in 2015 made a fivefold jump from NRs. 2.4 billion (~US$ 23.9 million) annually to NRs. 13 billion (~US$ 129 million). On top of that Chinese President Xi Jimping on March 25 offered a NRs. 14.5 billion (~US$ 144.1 million) economic aid portfolio earmarked to expand road construction and upgrade existing transport infrastructure (Shrestha, N 2015). Following the earthquake China pledged an additional NRs. 76.4 billion (~US$ 759 million) in earthquake reconstruction aid and a further NRs. 12.83 billion (~US$ 127.5 million) in grants for development of projects of mutual interest (Kathmandu Post 2015c).

Along the Syaphrubesi-Rasuwagadhi road these "gifts of development" (Yeh 2013) have manifested not only in the road infrastructure mentioned previously, but also as noted in *Chapter 6*, additional "gifts" including bags of rice, salt, Tibetan tea, tin roofing for local communities, and computers and monetary donations to upgrade local schools. Of course, there is much speculation as to the 'why' and 'how' China plans on manipulating this type of soft diplomacy termed "a handshake across the Himalayas" (Murton, Lord, and Beazley 2016).

Thus, I demonstrate how a mobilities framework has taken this dissertation full circle from the Rasuwagadhi border through the Trishuli Valley Trans-Himalayan power corridor to Kathmandu and back again to the border. In other words, a mobilities approach, focusing on the movement of people and commodities that actively involves the research following this movement, led me first to a research site at the border. Then, I traveled to the Trauma Center in Kathmandu where many of these same border people sought medical care. And finally, back to the border again to distribute aid to earthquake affected persons. The lived experience of mobilities actors illuminates the imbricated geopolitical, diverse cultural, gendered, economic, and social landscapes of this trajectory.

Future Concerns and Research Gaps

There has been some focus on gender studies in Nepal, notably from anthropologists in their ethnographies of high and low caste Hindu women and different ethnic groups (Schneiderman 2015; March 2002; Ahearn 2001; Ortner 1999; Cameron 1998; Bennett 1983) and within the research community (Sijapati 2017; Yadav 2016; Grossman-Thompson 2015; Bennett, Sijapati, and Thapa 2013; Rothchild 2006; Sangroula and Pathak 2002; Acharya and Bennett 1982,1981). This needs to continue and expand. In particular, the young generation of women growing

up in Nepal is having profound impacts on gendered norms. Nepalese women in sports and adventure travel are breaking centuries old stereotypes about what it means to be a woman and what types of work they can pursue in modern Nepal. Grossman-Thompson's (2014) research on female trekking guides in Nepal is a noticeable contribution to this field and is an area ripe for more research[121].

Jan Brunson's (2010) exploration of new forms of mobility (scooters and motorcycles) and how they are influencing courtship practices is another step in the right direction. While there has been an ongoing effort by some to research the changing attitudes toward women in contemporary Nepal, young Nepalese women's desire to bring about change in the way women are viewed and the way they identify is happening arguably faster than in any time previously.[122] The third gender movement in Nepal has become increasingly more visible, while little has been written about it. There is much new ground to be explored here that would contribute greatly to the field of women and gender studies.

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[121] For example, female Nepalese mountaineering guide Dawa Yangzum Sherpa, at age 23, became the first Nepalese woman to pass the International Federation of Mountain Guides Associations exam. She has summited Everest as well as some of the other highest peaks in the world (Callaghan 2018). Another example is Mira Rai, a female Nepalese mountain trail ultra-runner and former Maoist army combatant who was voted National Geographic People's Choice Adventurer of the Year "for her tireless efforts in breaking down barriers for women in Nepal through sports" (National Geographic 2017:para 1).

[122] There have been several media reports about female Nepalese commercial airline pilots (Republica 2017) and the first female Nepalese helicopter captain (Kestevan 2017).

While hydro project-road mobilities have played an important role in creating new local mobility pathways and synergies for local populations, the sustainability of this model is unknown and arguably untenable. It is underwritten by the hydropower companies, and the question of how many demands by concerned communities a given hydro project can continue to fund is unknown and possibly untenable. The willingness of hydropower companies to deal with local blockades and protests quickly has emboldened local actors to make more and greater demands.

This is a problem hydropower companies are now aware of and actively seeking to address. Equitable profit-sharing and social corporate responsibility mechanisms for project-affected populations are evolving in the Nepal hydropower landscape. While it is encouraging to see local actors creating agency-scapes previously unavailable to them, more research concerning this is needed to reach a solution that is equitable to all stakeholders. Hopefully, this will not result in heavy-handed top-down restrictions and a return to previous center periphery asymmetries.

Corruption is endemic in the system, affecting all the mobilities I researched. Recent research by Rankin and colleagues in the context of road building (2017) is a welcome opening that needs to be widened. While a sensitive subject with Kathmandu power elites, it is mirrored all the way down to the community level—the modus

operandi of all levels of Nepalese institutions. With the recent completion of local elections (2017), the political vacuum left by a decade without local elections has finally been addressed. Much of the blame for corruption at the local level was shifted to this vacuum and the ad hoc political institution of the All Party Mechanism that temporarily filled it. Here, research on the transparency of the new local elections emerges as fertile ground for scholars interested in corruption and contested political landscapes.

Many pundits in Kathmandu see China's soft diplomacy in the guise of the Belt and Road Initiative as a win-win, bringing new infrastructure projects where they are sorely needed. China's infrastructure projects domestically (Ansar et al. 2016) and abroad have not always matched expectations (Eisenman and Stewart 2017). Now that China has overtaken India in foreign direct investment in Nepal there is a portfolio of infrastructure projects ongoing and in the works. One of the most ambitious is the Trans-Himalayan railway, an extension of the Qinghai-Tibet railway that is planned to move south from Kyirong to the Rasuwagadhi border then down the Trishuli Valley to Kathmandu and Lumbini on the southern border. With so little known about Chinese infrastructure projects in Nepal there are rich opportunities for research and analysis.

The social cost of natural disasters was brought into sharp focus by the

earthquake and this knowledge needs to be incorporated into the rebuilding of not only roads but also all future infrastructure projects as well. In this regard, gendered mobility should be a major component of future research. Currently in Nepal women's rights and women's empowerment are given lip service for political expediency but on the ground, experiences indicate that not much has changed even after the civil war and the Maoist rhetoric about women's representation and rights. While much of the previous research on gendered mobility has focused on Kathmandu, future research needs to expand the field to include rural and mountainous regions as well.

Finally, analyzing the outcomes of the two present border crossings at Kodari and Rasuwagadhi will be instructive to the push for development of future border crossings. Natural disasters like the Sun Koshi landslide and the earthquakes affected both existing border crossings. Again a mobilities framework approach to investigating these incidents as well as others throughout Nepal and elsewhere will help inform a more comprehensive post disaster response and reconstruction process by providing a better understanding of lived experiences in mobility-scapes, how mobility is improvised when the main pathways are blocked, and how disaster-mobilities can be influenced by virtual mobility.

Focusing on mobilities in a Trans-Himalayan power corridor connecting Nepal

and China, this dissertation introduces a new analytical tool that helps bring clarity and focus to complex and convoluted contested landscapes embedded in geopolitical, gendered, heterogeneous cultural, and socioeconomic expanses of a contemporary globalized pathway. It may be further used to understand how people are culturally embedded in multiple social and material landscapes in which they move and inhabit.

APPENDIX A

HH Gendered Mobility Research Questionnaire 2014 Enumerator: ____Date____

Tape Recorder # ____ Folder ___ Recording code 802_00____

I Household information

Village VDC Ward District

Name _____Sex M F Age Title
Occupation Marital status M S D Ethnicity Religion
Household head Y N If no then relation to household head
Education: literate Y N Grade completed _____ Languages spoken _____
Number of children: Boys Ages Girls Ages
Family members in foreign country Y N (list below)

Relation	M/F	Age	M/S	Duration	Place	Job	Income Rs/yr

1. Where were you born?

2. How long have you lived here?

3. What is your main professions? (list from 1-6 with 1 most important)

Agriculture___ Business___ Service___ Labor____Administration____ Other____

4. What is your main source of income? Yearly income? (Rs)____

5. Is your yearly income enough to support your family? Y N

6. If not how do you supplement your income?
Loan from bank Y N Loan from relative Y N Other (specify)

7. Do you receive remittances from a relative who works outside Nepal? Y N

8. How much remittance do you receive annually? (Rs)___

9. Who owns your house & land? Husband Wife Both

10. Who makes the financial decisions? Husband Wife Both

II Road questions

1. Is it good that the Chinese paid for the road? Y N Explain

2. How do you feel about Nepal having to ask China to build the road?

3. Is it good that Nepal is asking for help from China?

4. What else have the Chinese done for this area?

5. Have the Chinese given you money, food, computers, school equipment?

6. How does that make you feel about the Chinese?

7. Does the new road make you feel more connected to Nepal or to China? Explain

8. Would you like to live across the border in Kyirong or elsewhere? Y N Explain

9. How much was the price of transporting goods before the road per kg? Now?

10. After the road was completed has the price of goods gone up or down and why?

Examples: Price of rice before?____ (Rs/kg) After?_____
Other examples? Salt___ Sugar___

11. After the road was completed has your business gone up or down and why?

12. After the road was completed do you think the number of local people leaving to find work outside has increased? Y N Explain:

13. Since the road was completed have local people found more work in the area? Y N Explain:

Type of work	Y	N
Hydro work		
Truck work		
Import/export		
Hotels/restaurants		
Other		

If other specify

14. Since the road was completed have local people returned to the area to start new businesses. Y N Explain

15. Has the road made your life easier? Explain how.

16. Do you think the new road is good, bad, or both and why?

17. Is there anything else you would like to say about the road?

III Mobility Questions

III.1 Mobility & Gender

1. Do you feel free to move about your village whenever you want to? Y N Explain:

2. Do you think the women in this village are as free to move around as the men? Y N Explain:

3. Is there any cultural/community/family restriction for you to go out and wander around public spaces, on the road, or travel if you want? Y N Explain

4. If you are restricted then how and by whom? a) family b) community c) local community leaders d) police e) army - Explain

5. Where would you like to go that you feel you are restricted from going?

6. Is it OK for women to go out alone? Y N Explain

6a. (For women) Do you go out alone? Y N Explain

7. Who usually accompanies women when the go out and travel?

7a. (For women) Who usually accompanies you when you go out and travel?

8. Do women need to have a male escort when they travel? Y N Explain

8 a. (For women) Do you have to have a male escort when you travel? Y N Explain

9. Do you think women like to have a male escort when they go out? Y N Explain

9 a. (For women) Would you like to have a male escort when you go out? Y N Explain

10. Should women have the freedom to go out where ever they want? Y N Explain

11. Should men have the freedom to go out where ever they want? Y N Explain.

12. Why is there a difference in whether women or men should be able to go where ever they want?

III.2 Mobility & Economics

13. Do you have access to your money in your household? Y N Explain

14. Who controls the money in your household?

15. Do you have enough of your own money to travel when you want? Y N Explain

16. Do you have your own means of transportation like a scooter/motorcycle? Y N What type?

17. What do you usually use for transportation? Public bus? Motorcycle? Jeep? Other

III.3 Mobility & Livelihood

18. How has the new road helped women? Explain Examples :

a. Has the new road helped you start a new business Y N Explain

b. Has the new road made it easier to collect water? Y N Explain

c. Has the new road made it easier to collect firewood? Y N Explain

d. Has the new road made it easier to collect fodder? Y N Explain

e. Has the new road made it easier to get to market? Y N Explain

f. Has the new road made it easier to get to medical care? Y N Explain
Where is the nearest health post? How do you get there?
How long does it take to get there?

g. Has the new road helped you get better education for your children? Y N

Explain

19. Where do your children go to school? Place and distance from village.

20. Have women benefitted from any job opportunities that the road has brought? Y N Explain

21. Have men benefitted from any job opportunities that the road has brought? Y N Explain

III.4 Mobility & Impacts

22. Has the new road had any negative impacts on women? Y N Explain

23. Has the new road had any negative impacts on men? Y N Explain

24. Has the new road had any negative impacts on the community? Y N Explain

Increase in theft	**Y**	**N**
Increase in smuggling	**Y**	**N**
Increase in violence	**Y**	**N**
Increase in violence to women	**Y**	**N**

Other:

25. What improvements would make women's mobility easier? Y N Explain

26. What improvements would make men's mobility easier? Y N Explain

27. Do you remember the mobility in this area changing over time? What changes occurred?

III.5 Virtual mobility

28. Do you have a cell phone? Y N

29. How has the cell phone made your live easier? Y N Explain

30. Do you feel better connected to your friends and family with your cell phone? Y N Explain

31. Do you do business with your cell phone? Y N Explain

32. Do you order supplies from the market with your cell phone? Y N What market town?

33. How do the goods you order by cell phone from the market reach your village?

35. Do you conduct business in Kyirong with your cell phone? Y N Explain

36. Does having a cell phone make you fell safer? Y N Explain

III.6 Future mobility

37. How do you see this area changing in the next 20 years ?

38. Do you think the train will come down this valley? Y N When?

39. Do you want a train to come down this valley? Y N Why?

40. Anything else you would like to say or ask?

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